

Aliso Canyon Project

Biological Technical Report

PDS2014-TM-5589 PDS2014-ER-14-08-011

September 18, 2014

Project Proponent:

Zephyr Partners

700 Second Street Encinitas, CA 92024

Prepared for:

County of San Diego

Planning & Development Services 5510 Overland Avenue, Suite 310 San Diego, CA 92123 Karl Osmundson

County-Approved Biological Consultant

Prepared by:

HELIX Environmental Planning, Inc.

7578 El Cajon Boulevard, Suite 200 La Mesa, CA 91942

Aliso Canyon Project Biological Technical Report

TABLE OF CONTENTS

Section		Page
SUMMAI	RY	S-1
1.0 INTR	RODUCTION	1
	Purpose of the Report	
	Project Location and Description	
	1.2.1 Project Location	
	1.2.2 Project Description	
1.3	3 Methods	
	1.3.1 Literature Review	5
	1.3.2 General Biological Surveys	5
	1.3.3 Focused Species Surveys	6
	1.3.4 Jurisdictional Delineation	7
	1.3.5 Survey Limitations	8
	1.3.6 Nomenclature	8
1.4	4 Environmental Setting	8
	1.4.1 Regional Context	8
	1.4.2 General Land Uses	8
	1.4.3 Disturbance	9
	1.4.4 Topography and Soils	9
	1.4.5 Vegetation Communities/Habitat Types	10
	1.4.6 Flora	
	1.4.7 Fauna	
	1.4.8 Sensitive Vegetation Communities/Habitat Types	
	1.4.9 Sensitive Plant Species	
	1.4.10 Sensitive Animal Species	14
	1.4.11 Jurisdictional Waters and Wetlands	
	1.4.12 Habitat Connectivity and Wildlife Corridors	
1.5	5 Applicable Regulations	17
	1.5.1 Federal Government	
	1.5.2 State of California	19
	1.5.3 County of San Diego	20
20 PROI	JECT EFFECTS	22
	Special Status Plant Species	
	2 Special Status Animal Species	
	Riparian Habitat or Sensitive Natural Communities	
	Jurisdictional Wetlands and Waterways	
	5 Wildlife Movement and Nursery Sites	
	5 Indirect Impacts	
2.0	, manage mipueu	

TABLE OF CONTENTS (cont.)

Sect	<u>tion</u>	Page
3.0	SPECIAL STATUS SPECIES	25
	3.1 Guidelines for Determining Significance	25
	3.2 Analysis of Project Effects	26
	3.3 Cumulative Impact Analysis	28
	3.4 Mitigation Measures and Design Considerations	31
	3.5 Conclusions	
4.0	RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITY	33
	4.1 Guidelines for Determining Significance	33
	4.2 Analysis of Project Effects	33
	4.3 Cumulative Impact Analysis	
	4.4 Mitigation Measures and Design Considerations	34
	4.5 Conclusion	35
5.0	JURISDICTIONAL WETLANDS AND WATERWAYS	35
	5.1 Guidelines for Determining Significance	35
	5.2 Analysis of Project Effects	35
	5.3 Cumulative Impact Analysis	35
	5.4 Mitigation Measures and Design Considerations	
	5.5 Conclusion	35
6.0	WILDLIFE MOVEMENT AND NURSERY SITES	
	6.1 Guidelines for Determining Significance	36
	6.2 Analysis of Project Effects	
	6.3 Cumulative Impact Analysis	39
	6.4 Mitigation Measures and Design Considerations	39
	6.5 Conclusion	39
7.0	LOCAL POLICIES, ORDINANCES, AND ADOPTED PLANS	
	7.1 Guidelines for Determining Significance	39
	7.2 Analysis of Project Effects	
	7.3 Cumulative Impact Analysis	
	7.4 Mitigation Measures and Design Considerations	
	7.5 Conclusion	44
8.0	SUMMARY OF PROJECT IMPACTS AND MITIGATION	44
9.0	LIST OF PREPARERS AND PERSONS/ORGANIZATIONS CONTACTED)50
10.0) REFERENCES	51

TABLE OF CONTENTS (cont.)

LIST OF APPENDICES

A B C D E	Plant Species Observed Animal Species Observed or Detected Sensitive Plant Species with Potential to Occur Sensitive Animal Species with Potential to Occur Explanation of Status Codes for Plant and Animal Species Site Photographs	
	LIST OF FIGURES	
<u>No.</u>	<u>Title</u> <u>Follows</u>	Page
1	Regional Location Map	2
2	Project Vicinity Map (Aerial Photograph)	
3	Project Vicinity Map (USGS Topography)	
4	MSCP Designations	
5	Tentative Map	
6	USDA Soils	
7	Vegetation and Sensitive Resources	
8	Potential Waters of the U.S.	
9 10	Potential Waters of the State County RPO Wetlands	
11	Project Impacts	
12	Vegetation and Sensitive Resources/Impacts	
13	Proposed Biological Open Space/Conceptual Signage and Fencing	
	LIST OF TABLES	
<u>No.</u>	<u>Title</u>	Page
1	Biological Survey Information	<i>6</i>
2	Existing Vegetation Communities	
3	Existing Waters of the U.S	
4	Existing Waters of the State	
5	Existing County RPO Wetlands	
6	Impacts to Vegetation Communities	
7	Cumulative Impacts to Biological Resources	29
8	Summary of Vegetation Communities, Impact, and Mitigation for the Aliso Canyon Subdivision Project	15
9	Summary of Mitigation Measures	
_	~	

THIS PAGE INTENTIONALLY LEFT BLANK

SUMMARY

At the request of Zephyr Partners-RE LLC (project applicant), HELIX Environmental Planning, Inc. (HELIX) has completed a biological technical report for the proposed Aliso Canyon Subdivision Project (proposed project) located within an approximately 31-acre property (project site or site) in the unincorporated community of Rancho Santa Fe, San Diego County, California. The proposed project generally consists of subdivision of Assessor's Parcel Number (APN) 265-270-84 into eight individual lots for single-family residential use. The purpose of this report is to document the existing biological conditions on and in the immediate vicinity of the project site, and provide an analysis of potential impacts to sensitive biological resources with respect to local, state, and federal policy. This report provides the biological resources technical documentation necessary for project review under the California Environmental Quality Act (CEQA) by the County of San Diego Planning & Development Services (PDS).

The project site occurs within the North County Metro Segment of the Draft North County Multiple Species Conservation Program (NCMSCP) planning area, outside of Pre-Approved Mitigation Area (PAMA). HELIX conducted general biological surveys, jurisdictional delineation surveys, rare plant surveys, and breeding season protocol-level surveys for the coastal California gnatcatcher (*Polioptila californica californica*) in the winter and spring of 2014.

The project site supports 10 vegetation community or land use types: southern willow scrub, freshwater marsh, native grassland, Diegan coastal sage scrub, non-native grassland, Eucalyptus woodland, non-native vegetation, intensive agriculture, disturbed habitat, and developed land. Sensitive uplands on site include native grassland, Diegan coastal sage scrub, and non-native grassland. Sensitive wetland/riparian habitat types on site include southern willow scrub and freshwater marsh.

Very low numbers of two County List D plants were observed on the project site during 2014 rare plant surveys: San Diego sunflower (*Bahiopsis laciniata*) and ashy spike-moss (*Aelaginella cinerascens*). Based on the result of 2014 breeding season protocol surveys, the site was determined to support temporary foraging, dispersal, and/or migration habitat for the coastal California gnatcatcher, which is a federally threatened, California State species of special concern, and County Group 1 species. The site also supports temporary foraging and nesting habitat for the County Group 1 animal, Cooper's hawk (*Accipiter cooperi*). Last, temporary foraging habitat exists for the County Group 2 species, southern mule deer (*Odocoileus hemionus fuliginata*), and.

The site supports a short section of an unnamed ephemeral drainage feature potentially subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). Portions of this drainage feature that support southern willow scrub, freshwater marsh, and wetland conditions meet the criteria to be determined County Resource Protection Ordinance (RPO) wetlands.



Potential significant impacts were identified for sensitive species and sensitive natural communities. The project has been specifically designed to avoid and setback from sensitive resources, including County RPO wetland and adjoining fragments of native grassland and Diegan coastal sage scrub. Proposed developments have been specifically targeted within highly disturbed and developed portions of the site. The proposed pad locations have been sited as far away from sensitive resources as possible. Following County Guidelines, a total of 20.4 acres of the approximately 31-acre site will be considered impacted either by direct physical removal of the habitat or by further fragmenting, isolating, and degradation of the habitat. Of the 20.4 acres considered to be impacted, 10.9 acres are considered impact neutral and would remain in existing and proposed easements, whose designations would limit the amount of physical disturbance in the future. Approximately 3.1 acres would be placed in a biological open space easement which would protect the resources in perpetuity.

Measures related to the following topics are proposed herein to fully mitigate potential impacts of the project: coastal California gnatcatcher avoidance; raptor avoidance; compensatory mitigation for sensitive habitat; and migratory bird avoidance. Successful implementation of these measures would mitigate potential impacts to below a level of significance.



1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

At the request of Zephyr Partners-RE LLC (project applicant), HELIX Environmental Planning, Inc. (HELIX) has completed a biological technical report for the proposed Aliso Canyon Subdivision Project (proposed project) located within an approximately 31-acre property (project site or site) in the unincorporated community of Rancho Santa Fe, San Diego County, California. The proposed project generally consists of subdivision of Assessor's Parcel Number (APN) 265-270-84 into eight individual lots for single-family residential use. The purpose of this report is to document the existing biological conditions on and in the immediate vicinity of the project site, and provide an analysis of potential impacts to sensitive biological resources with respect to local, state, and federal policy. This report provides the biological resources technical documentation necessary for project review under the California Environmental Quality Act (CEQA) by the County of San Diego Planning & Development Services (PDS).

1.2 PROJECT LOCATION AND DESCRIPTION

1.2.1 Project Location

The approximately 31-acre project site (APN 285-270-84) is located at 18531 Aliso Canyon Road in the unincorporated community of Rancho Santa Fe, San Diego County, California (Figures 1 and 2). Aliso Canyon Road boarders the northern and eastern site boundaries, while Pacifica Ranch Drive (a private road) longitudinally bisects the site. Specifically, the project site is located within Sections 10 and 13, Township 13 South, Range 3 West on the U.S. Geological Survey (USGS) 7.5-minute Rancho Santa Fe quadrangle map (Figure 3).

The site occurs within the North County Metro Segment of the Draft North County Multiple Species Conservation Program (NCMSCP) planning area, outside of Pre-Approved Mitigation Area (PAMA; Figure 4).

1.2.2 Project Description

The proposed Aliso Canyon Subdivision Project site is located within the unincorporated community of Rancho Santa Fe in west-central San Diego County, California. The approximately 31-acre site is located at 18531 Aliso Canyon Road; the County APN is 265-270-84. Aliso Canyon Road borders the property along the northern and eastern boundaries. The proposed project will require County approval of a Tentative Map and Grading Plan, to be filed concurrently, in order to implement the proposed development plans.

As depicted on Figure 5, the project proposes the subdivision of the approximately 31-acre parcel into 8 individual lots (Lots 1-8) for single-family residential use and 1 street lot (Lot 9 - Pacifica Ranch Drive). One single-family residence is present on site and would remain with project implementation (Lot 8). The remaining 7 lots are proposed for future single-family residential development. The residential lots will range from approximately 2 to 8.3 acres. In addition, the project proposes to vacate public roadway right-of-way for SA 680, which crosses



the northern/northeastern portion of the site. The alignment for SA 680 was formerly removed from the County's Circulation Element in 1995 and is no longer proposed for construction.

Roadway Improvements: Pacifica Ranch Drive, which exists as a private road easement, currently extends from its intersection with Aliso Canyon Drive southward through the western/central portion of the site and provides access to the existing subdivision to the south of the subject property. Main access to the site will occur from the north from Aliso Canyon Road to existing Pacifica Ranch Drive. No improvements (e.g., turn lanes, signalization) to the existing intersection at Aliso Canyon Road/Pacifica Ranch Road or the on-site portion of Pacifica Ranch Road (with exception of construction of a trail along the eastern side) are required or proposed to accommodate project-generated traffic; however, Pacifica Ranch Drive is proposed as a private street lot with implementation of the proposed project (Lot 9). Refer also to *Recreational Trails and Parks*, below.

Secondary access would be provided from Aliso Canyon Road along the eastern project boundary. As shown on the Tentative Map, portions of Aliso Canyon Road along the project frontage will require widening to ensure an improved width of 24 feet.

Additionally, project design includes the construction of a private on-site 40-foot-wide looped roadway easement (Street "A" as shown on the Tentative Map) that will provide access to proposed Lots 4-6 and a connection between Pacifica Ranch Drive and Aliso Canyon Road. The easement would be graded to a width of 40 feet and improved to 30 feet, with a 5-foot-wide shoulder on either side and surfaced with aggregate concrete (AC). Minor improvements where Street "A" will intersect with Aliso Canyon Road to the east and Pacifica Ranch Drive to the west will be required to allow for the connection to these existing roadways.

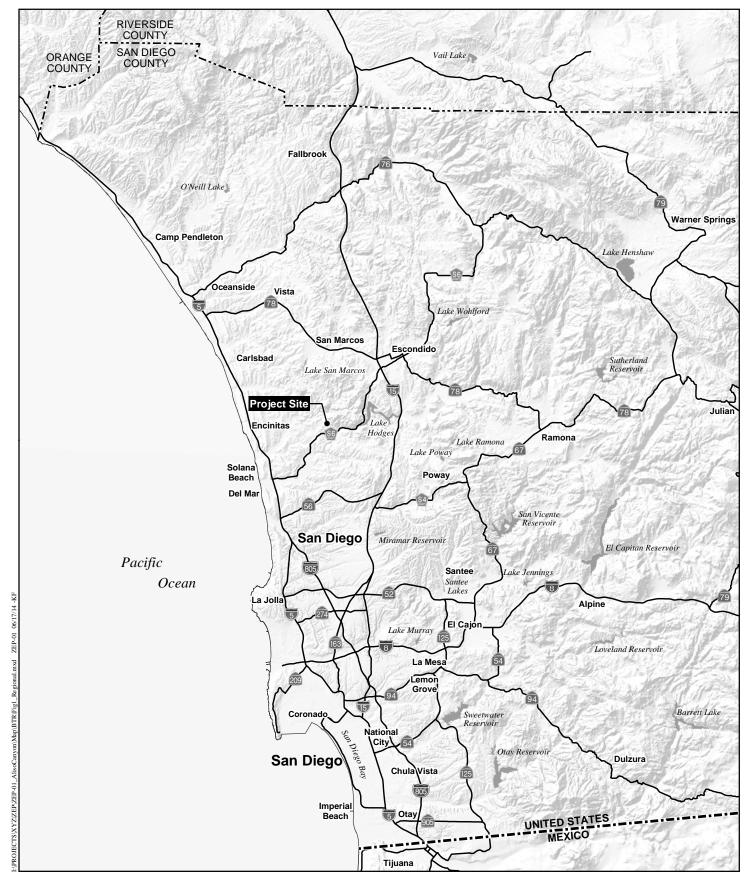
No cul-de-sacs or on-street parking are proposed with the project. All roadways providing access to or internal circulation for the project would be designed consistent with County roadway design standards and in compliance with that required by the Ranch Santa Fe Fire Department to ensure that emergency access will be adequate at all times.

<u>Utilities and Services</u>: The Rancho Santa Fe Community Service District will provide sewer service to the site. The project will connect to sewer force main stub-outs within Pacifica Ranch Drive. Flows from on site will either gravity flow or be pumped to the force main; refer to the utility improvements shown on the Tentative Map.

Water service will be provided by the Olivenhain Municipal Water District. The property is connected to the public water system. An existing 27-inch-wide water line is located within Pacifica Ranch Drive. Minor on-site improvements (e.g., extension of a water line eastward within Street "A" and extension of water lines from the existing main to adjacent lots) will be required to provide water service to all proposed Lots.

Minor on-site improvements will be required for the treatment of storm water. Connection or improvements to an existing public storm drain system are not proposed. Bioretention basins are proposed on each individual lot to allow for the temporary storage and infiltration of storm water, as shown on the Grading Plan prepared for the project. Additionally, as identified on the





Regional Location Map



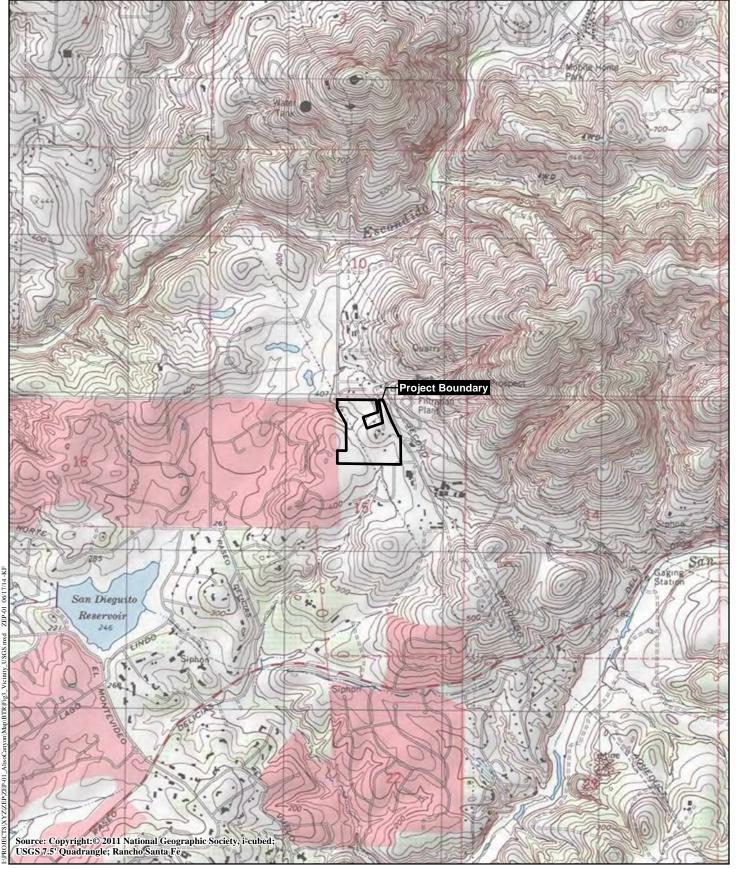




Project Vicinity Map (Aerial Photograph)

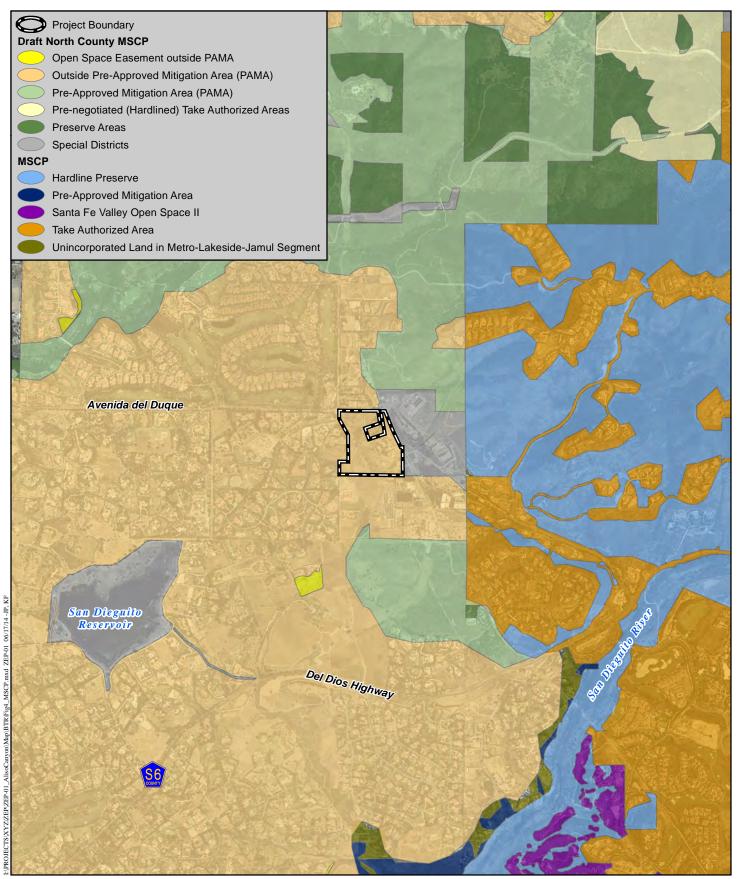






Project Vicinity Map (USGS Topography)

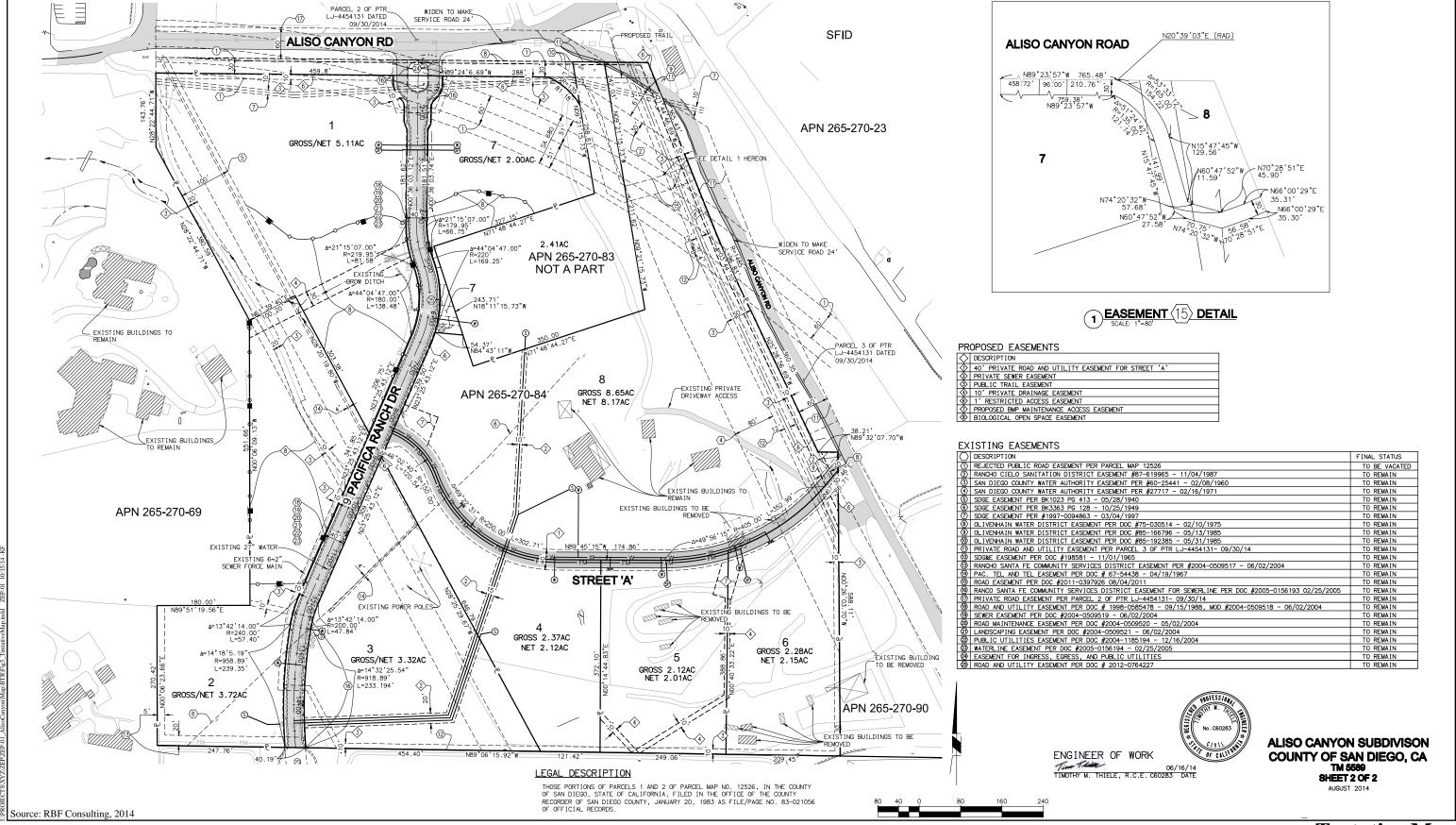




MSCP Designations







Tentative Map



Grading Plan, Low Impact Development (LID) and Site Design Best Management Practices (BMPs) will be implemented to ensure that runoff rates remain equal or less than that under existing conditions and that water quality is maintained. Additionally, Source Control BMPs will be implemented to ensure that stormwater quality is not adversely affected over the long term. Additional discussion is provided in the Drainage Study and Storm Water Management Plan prepared for the project by RBF Consulting in June 2014.

Fire protection services will be provided by the Rancho Santa Fe Fire Protection District. Additionally, students from the proposed development would attend R. Roger Rowe Elementary and Middle School (grades K-8) located at 5927 La Granada in Rancho Santa Fe, and Torrey Pines High School (grades 9-12) located at 3710 Del Mar Heights Road in La Jolla. All service agencies have provided a Project Facility Availability Form, as required by the County, indicating that they can adequately provide services to the site; however, some minor improvements (e.g., vegetation clearing to reduce wildfire potential) or the payment of fees (e.g., schools) may be required.

<u>Recreational Trails and Parks</u>: Consistent with that shown on the County of San Diego Trails Master Plan (adopted 2008) for the community of San Dieguito, the project proposes four trail easements, located along portions of the northern, eastern, southern, and western property boundaries and along a portion of the western side of Pacifica Ranch Drive on site.

Along the northern project boundary, adjacent to Aliso Canyon Road, a 10-foot-wide trail easement is proposed. The easement would abut the existing pavement within the existing 60-foot-wide right-of-way for the roadway. The trail will be improved to 10 feet in width and surfaced with decomposed granite, consistent with County design standards for a Community Pathway. A 10-foot-wide trail easement is also proposed along the eastern and southern boundaries of the property.

A trail easement is also proposed to extend southward from Aliso Canyon Road along the western boundary of the existing on-site San Diego Gas & Electric (SDG&E) easement to its intersection with Pacifica Ranch Drive. The trail alignment will then trend along the western boundary of Pacifica Ranch Drive to the southern property boundary. Additionally, a trail easement is proposed in the southern portion of the property from the western property boundary to the proposed trail alignment along the western edge of Pacific Ranch Drive (ultimately allowing for off-site improvements by others to provide a connection to Via del Charro). These trails will be graded to 10 feet in width, improved to 8 feet in width, and surfaced with decomposed granite, consistent with the County's design standards for a Community Trail.

To ensure that County requirements for the provision of park lands are met, the applicant would be required to pay fees, consistent with that required by the County's Park Land Development Ordinance (PLDO) prior to the issuance of building permits. Payment of such fees would minimize and/or avoid any adverse impacts created by the 8 additional residences on the County's ability to provide adequate opportunities for recreation to its residents.



<u>Landscaping</u>: No common areas that would require maintenance by a Homeowners' Association (HOA) are proposed with the project. All landscaping will occur on privately-owned lots. A Conceptual Landscape Plan, therefore, is not required and one has not been prepared.

Grading Plan: A Grading Plan is required to illustrate existing site topography and the proposed grading that is required in order to accommodate the proposed development. As designed, project grading will require approximately 25,000 cubic yards of balanced cut and fill over the approximately 31-acre property. No export of material is required or proposed.

General Plan and Zoning

The subject property is located within the County's San Dieguito Community Planning area. The existing County General Plan land use designation for the property is SR-2 (Semi-Rural Residential, minimum 2-acre lot size); the Regional Category is Semi-Rural. Existing zoning for the parcel is RR-5 (Rural Residential). No changes to the land use, zoning, or regional category are proposed with the project.

Existing Setting

The majority of the project site is generally disturbed. A portion of the property supports limited agricultural uses (palm nursery) and associated structures (storage sheds, etc.). A single-family residence is present in the central portion of the site (proposed Lot 8). The residence and several associated outbuildings on Lot 8 will remain on site with project implementation; all other existing structures on site will be demolished.

The project site supports the following habitats: Diegan coastal sage scrub, non-native grassland, southern willow scrub, freshwater marsh, and native grassland. Other common (non-sensitive) vegetation communities and land uses on site include non-native vegetation, eucalyptus woodland, intensive agriculture, disturbed habitat, and urban/developed land.

On-site elevations range from approximately 465 feet above mean sea level (amsl) to approximately 376 feet amsl. Steeper terrain is present generally in the northwestern and central portions of the property, as shown on the *Slope Analysis and Steep Slope Map* prepared for the project. No steep slopes as defined by the County are present.

A 100-foot-wide SDG&E easement crosses the western portion of the site. In the eastern portion of the site, the property is encumbered by an 80-foot-wide easement and a 50-foot-wide easement for the San Diego County Water Authority; and, a 20-foot-wide easement for the Olivenhain Water District. Several other private and public road easements and utility easements are also located on the property, as shown on the Tentative Map.

Surrounding land uses generally include semi-rural residential uses to the north, west, and south. The Bridges at Rancho Santa Fe Golf Course is located just to the northwest. The Santa Fe Irrigation District treatment facility is located just to the northeast of the site. Rancho Cielo Estates, a residential estate development, lies to the east. The Wholesale Nursery is located to the southeast.



1.3 METHODS

1.3.1 <u>Literature Review</u>

Prior to conducting biological field surveys, a search of the California Natural Diversity Database (CNDDB) for information regarding sensitive species known to occur within 5 miles of the project site was performed by HELIX in 2014, as well as a review of U.S. Fish and Wildlife (USFWS), SanBIOS, and MSCP sensitive species databases. A search of the San Diego Plant Atlas (SDNHM 2010) also was conducted.

1.3.2 General Biological Surveys

General biological surveys of the project site and approximately 100 feet beyond were conducted by HELIX on January 23, 2014 and April 10, 2014. Vegetation was mapped on a 1"=100' scale aerial of the site. A minimum mapping unit size of 0.10 acre or less was used when mapping small stands of Diegan coastal sage scrub on site. Smaller stands were mapped where the stands occurred in close proximity to more intact stands or groupings of stands. Isolated shrubs and small stands were mapped as part of the surrounding habitat. Native grassland patches were mapped using approximately 1 x 1 meter quadrat in accordance with County requirements. The entire site was surveyed on foot with the aid of binoculars. Representative photographs of the site were taken, with select photographs included in this report as Appendix F. Plant and animal species observed or otherwise detected were recorded in field notebooks. Animal identifications were made in the field by direct, visual observation or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs. The site was examined for evidence of potential jurisdictional waters and wetlands, including vernal pools. In addition to the general biological survey and vegetation mapping, HELIX conducted jurisdictional delineation surveys, rare plant surveys, and 2014 breeding season protocol-level surveys for coastal California gnatcatcher (Polioptila californica californica). Table 1 provides a summary of biological surveys conducted for the project.



Table 1 BIOLOGICAL SURVEY INFORMATION			
DATE/TIME	PERSONNEL	SURVEY CONDITIONS	SURVEY TYPE
January 23, 2014 0800-1200	Jason Kurnow	Start: 52°F, 80% could cover, wind 0-1 mph End: 65°F, 30% could cover, 5-10 mph	General biological survey, basic wetland delineation
April 10, 2014 0800-1500	Stacy Nigro Jason Kurnow	Start:64°F, 30% cloud cover, wind 0-1 mph End: 79°F, 10% cloud cover, 8 mph wind	General biological survey, vegetation mapping, rare plant survey, and formal jurisdictional delineation
April 26, 2014 0700-1100	Jason Kurnow	Start: 52°F, 90% cloud cover, wind 5-8 mph End: 59°F, 80% cloud cover, wind 4-6 mph	Coastal California gnatcatcher survey #1 of 3
May 5, 2014 0745-1030	Jason Kurnow	Start: 63°F, 70% cloud cover, wind 1-2 mph End: 70°F, 30% cloud cover, wind 1-3 mph	Coastal California gnatcatcher survey #2 of 3
May 12, 2014 0700-1145	Jason Kurnow	Start: 67°F, 0% cloud cover, wind 0-3 mph End: 75°F, 0% cloud cover, wind 1-2 mph	Coastal California gnatcatcher survey #3 of 3
May 23, 2014 1600-1800	Karl Osmundson	Start: 69°F, 50% cloud cover, wind 5-10 mph End: 67°F, 30% cloud cover, wind 5-10mph	Rare plant survey and formal jurisdictional delineation

^{*}USFWS Section 10(a) permit number TE837308-5

1.3.3 Focused Species Surveys

Rare Plant Surveys

Rare plant surveys were conducted by HELIX on April 10 and May 23, 2014 (Table 1). The entire site was traversed by foot and habitat areas were inspected for the presence of rare plant species. Opportunistic inspections for rare plants were also performed during other surveys conducted in January, April, and May 2014. Rare plants investigated include those that are listed as threatened or endangered by the USFWS or the CDFW; those afforded List 1-4 designation by the CNPS; and those that are on the County Sensitive Plant List (County 2010b).



Coastal California Gnatcatcher

Protocol surveys for coastal California gnatcatcher were completed by HELIX during the 2014 breeding season on April 26 and May 5 and 12, 2014 (Table 1). Three site visits were completed per USFWS protocol (USFWS 1997). The surveys were conducted by walking through vegetation or on adjacent paths, and birds were viewed with the aid of binoculars, where necessary. If gnatcatchers were not detected passively, a digital call-prompt was played.

1.3.4 Jurisdictional Delineation

Prior to beginning jurisdictional delineation fieldwork, aerial photographs (1"=100' scale), National Wetlands Inventory (NWI) maps, USGS topographic maps, and soil survey maps were reviewed to determine the location of potential jurisdictional resources. An initial jurisdictional delineation of the project site was conducted by HELIX on April 10, 2014, with additional data collection on May 23, 2014. The delineation was conducted to identify and map water and wetland resources potentially subject to U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344) and streambed habitats potentially subject to California Department of Fish and Wildlife (CDFW) jurisdiction pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code). The delineation was also conducted to determine the presence or absence of County Resource Protection Ordinance (RPO) wetlands. Areas generally characterized by depressions, drainage features, and riparian and wetland vegetation were evaluated.

Waters of the U.S.

Potential USACE-jurisdictional waters of the U.S. were delineated in accordance with the Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). Areas were determined to be non-wetland waters of the U.S. if there was evidence of regular surface flow (e.g., bed and bank) but the vegetation and/or soils criterion were not met.

Waters of the State

Potential CDFW-jurisdictional waters of the State were determined based on the presence of riparian vegetation or regular surface flow. Streambeds within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation" (Title 14, Section 1.72). The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream.

County Resource Protection Ordinance Wetlands

Areas were considered County wetlands if they met 1 of the 3 following attributes pursuant to the County RPO (County 2011): (1) at least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places); (2) the substratum is



predominantly undrained hydric soil; or (3) an ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

1.3.5 **Survey Limitations**

Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the lists of species identified are not necessarily comprehensive accounts of all species that utilize the site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed.

1.3.6 Nomenclature

Nomenclature used in this report comes from Holland (1986) and Oberbauer (2008) for vegetation; Baldwin et al (2012) for plants; Glassberg (2001) for butterflies; Collins and Taggart (2006) for reptiles and amphibians; American Ornithologists' Union (2010) for birds; and Baker et al. (2003) for mammals. Plant species status is taken from the California Native Plant Society (CNPS; 2010). Animal species status is from CDFW (2009 and 2010).

1.4 ENVIRONMENTAL SETTING

1.4.1 Regional Context

The project site is generally located in north San Diego County within the coastal valley and rolling hills between Escondido Creek to the north and San Dieguito River to the south. In the context of the Draft NCMSCP, the site occurs within the North County Metro Segment, outside of PAMA (Figure 4). Generalized climate in the region is regarded as dry, subhumid mesothermal, with warm dry summers and cold moist winters. Mean annual precipitation is between 14 and 18 inches and the mean annual temperature is between 60 and 62 degrees Fahrenheit. The frost-free season is 260 to 300 days.

Important biological resources in the region generally include core blocks of coastal sage scrub and riparian corridor habitat associated with Escondido Creek and San Dieguito River. The region hosts core populations of several sensitive species, including narrow endemic plants and listed animal species such as the coastal California gnatcatcher and least Bell's vireo (*Vireo bellii pusillus*), among others.

1.4.2 General Land Uses

General land uses on the project site include rural residential and agriculture, in addition to several utility easements. These are depicted on Figure 5. A portion of the property supports limited agricultural uses (palm nursery) and associated supporting structures (storage sheds, etc.). An existing single-family residence is present in the central portion of the site. The residence and associated outbuildings will remain on site.



A 100-foot wide SDG&E easement crosses the western portion of the site. In the eastern portion of the site, the property is encumbered by an 80-foot wide easement and a 50-foot wide easement for the San Diego County Water Authority; and, a 20-foot wide easement for the Olivenhain Water District. Several other private and public road easements and utility easements are also located on the property.

Surrounding land uses generally include semi-rural residential uses to the north, west, and south. The Bridges at Rancho Santa Fe Golf Course is located just to the northwest. The Santa Fe Irrigation District treatment facility is located just to the northeast of the site. Rancho Cielo Estates, a residential estate development, lies to the east. The Wholesale Nursery is located to the southeast.

1.4.3 Disturbance

The project site is highly disturbed as a result of previous and ongoing residential, agricultural, utility-related, maintenance, and recreation uses. Existing residential and facility developments on and in the immediate vicinity of the site have resulted in removal and fragmentation of habitat in the local area. The existing developments represent a physical barrier and disturbance to some animal species attempting to move to and from undeveloped habitats located further to the northeast and south of the site. Reptile and mammal species are expected to be most affected by the existing barriers, whereas birds and other avian species are expected to be less affected and could still use the fragmented habitat for dispersal.

The majority of the site has been subject to previous vegetation clearing and maintenance for the existing home site, nursery, and utility easements. This is evidenced by disturbed soils and a high prevalence of non-native vegetation occurs throughout the site. The limited native vegetation that occurs is highly fragmented and primarily dominated by disturbance-tolerant plant species. The site is also subject to regular noise and nighttime lighting disturbances associated with the existing roads and homes. Other notable disturbances include regular pedestrian traffic; vehicular traffic through Aliso Canyon Road and Pacifica Ranch Drive; off highway vehicle use; equestrian use; illegal dumping, trash, and debris; presence of exotic plant species; and use by domestic pets (dog, cat, horse). These disturbances degrade the existing habitat and preclude the use of the site by most sensitive species known to the region.

1.4.4 Topography and Soils

The project site is characterized by relatively flat land with a few shallow slopes and moderate undulations. Elevations range from approximately 380 feet above mean sea level (amsl) in the western portion of the site to approximately 460 amsl in the eastern portion. The site mostly consists of disturbed and developed uplands. No major peaks, ridgelines, valleys or other land features characterize the site. A single, east-west trending, unnamed ephemeral drainage feature traverses the northern half of the site. Review of aerial imagery and topographic maps suggests this feature is a tributary to San Dieguito Reservoir further to the west of the site.

Soils information was taken from the Natural Resource Conservation Services' Web Soil Survey (2014) and Bowman (1973). Five soil mapping units belonging to four soil series are mapped on the project site (Figure 6): Auld clay (5 to 9 percent slopes); Huerhuero loam (2 to 9 percent



slopes); Huerhuero loam (9 to 15 percent slopes); San Miguel rocky silt loam (9 to 30 percent slopes); and San Miguel-Exchequer rocky silt loams (9 to 70 percent slopes). The dominant soil on the site is Auld clay. The near entirety of surface soil observed on the site contains evidence of disturbance.

1.4.5 <u>Vegetation Communities/Habitat Types</u>

The project site is primarily characterized by disturbed and developed land. Where vegetation communities are present, they are predominately non-native, although scattered and fragmented stands of native habitat occur in limited areas.

A total of 10 vegetation community or land use types were mapped on the project site (Table 2): southern willow scrub, freshwater marsh, native grassland, Diegan coastal sage scrub, non-native grassland, Eucalyptus woodland, non-native vegetation, intensive agriculture, disturbed habitat, and developed land.

Table 2 EXISTING VEGETATION COMMUNITIES		
VEGETATION COMMUNITY*	ACRE(S)**	
Southern Willow Scrub (63320)	0.24	
Freshwater Marsh (52400)	0.11	
Native Grassland (42100)	0.2	
Diegan Coastal Sage Scrub - including disturbed (32500)	4.8	
Non-native Grassland (42200)	5.3	
Eucalyptus Woodland (11100)	1.5	
Non-native Vegetation (11000)	0.9	
Intensive Agriculture (18200)	3.2	
Disturbed Habitat (11300)	10.7	
Developed Land (12000)	4.4	
TOTAL	31.4	

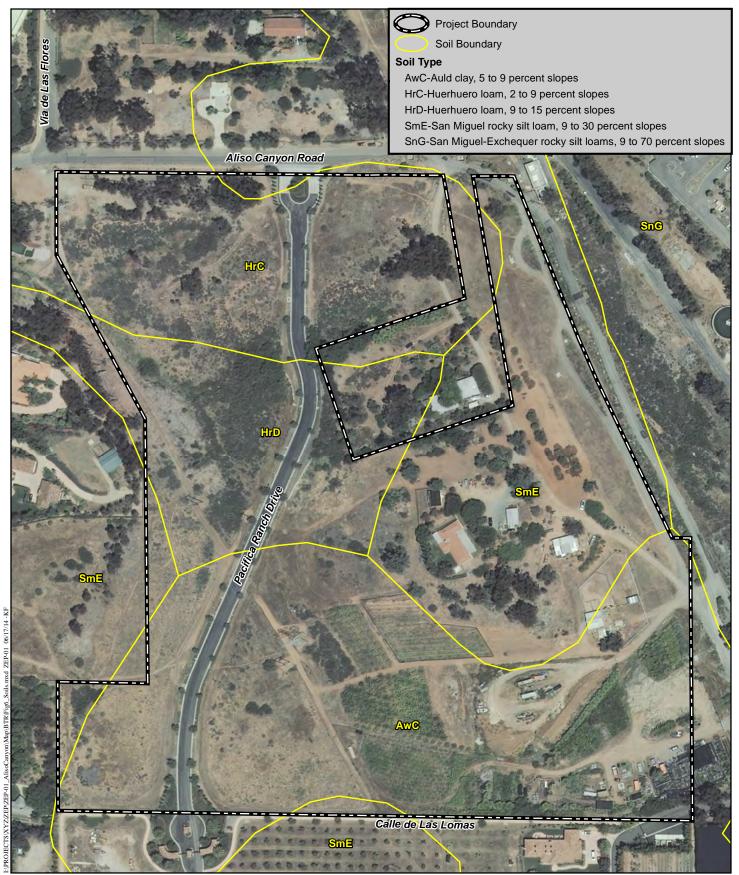
^{*} Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

Southern Willow Scrub

Southern willow scrub consists of dense, broadleaved, winter-deciduous stands of trees dominated by shrubby willows (*Salix* spp.) in association with mule fat (*Baccharis salicifolia*), and scattered emergent cottonwood (*Populus* spp.) and western sycamores (*Platanus racemosa*). This vegetation community occurs on loose, sandy or fine, gravelly alluvium deposited near stream channels during flood flows. Frequent flooding maintains this early seral community, preventing succession to a riparian woodland or forest (Holland 1986). In the absence of periodic flooding, this early seral type would be succeeded by southern cottonwood or western sycamore riparian forest.



^{**} Upland habitats are rounded to the nearest 0.1 acre, while wetland habitats are rounded to the nearest 0.01; thus, totals reflect rounding.



USDA Soils





A total of 0.24 acre of southern willow scrub occurs as three small isolated stands associated with an unnamed ephemeral drainage feature in the northern half of the site. The habitat is generally dominated by arroyo willow (*Salix lasiolepis*) and mule fat. Given its very small size and isolation from larger riparian stands in the local area, the southern willow scrub habitat on site is relatively low in quality, although it does support potential USACE-jurisdictional wetland waters of the U.S., CDFW-jurisdictional riparian-vegetated streambed, and County RPO wetland.

Freshwater Marsh

Coastal and valley freshwater marsh is dominated by perennial, emergent monocots, 5 to 13 feet tall, forming incomplete to completely closed canopies. This vegetation type occurs along the coast and in coastal valleys near river mouths and around the margins of lakes and springs, and freshwater or brackish marshes. These areas are semi- or permanently flooded yet lack a significant current (Holland 1986). Dominant species include cattails (*Typha* sp.) and bulrushes (*Schoenoplectus* sp.), along with umbrella sedges (*Cyperus* sp.), rushes (*Juncus* sp.), and spike-sedge (*Eleocharis* sp.).

A total of 0.11 acre of freshwater marsh occurs in association with the stands of southern willow scrub and unnamed ephemeral drainage feature. The dominant species is southern cattail (*Typha domingensis*). The freshwater marsh on site supports potential USACE-jurisdictional wetland waters of the U.S., CDFW-jurisdictional streambed, and County RPO wetland.

Diegan Coastal Sage Scrub (including disturbed)

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Four distinct coastal sage scrub geographical associations (northern, central, Venturan, and Diegan) are recognized along the California coast. Diegan coastal sage scrub may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*).

A total of 4.8 acres of relatively low quality Diegan coastal sage scrub occurs as scattered and fragmented stands on the site. The largest stands occur in the northwestern and central portions of the site. Dominant species are goldenbush (*Isocoma menziesii*), California sagebrush, California buckwheat, and coyote brush (*Baccharis pilularis*). The Diegan coastal sage scrub on site is considered relatively low in quality based on fragmentation, small patch size, existing disturbance, and lack of sensitive species.

Native Grassland

Native grassland is a community dominated by perennial bunchgrasses such as purple needle grass (*Nassella pulchra*) with annual and perennial forbs such as common golden stars (*Bloomeria crocea* ssp. *crocea*) and California blue-eyed grass (*Sisyrinchium bellum*). Native



grasslands generally occur on fine-textured soils that exclude the annual, exotic grasses. Native grasslands in California have been displaced by non-native grassland dominated by introduced annual species. Native grasslands occur throughout California as small isolated islands.

A total of 0.2 acre of native grassland was mapped on site as very small, isolated patches of purple needle grass. The patches are considered to be relatively low in quality based on fragmentation; very small patch size; adjacency with non-native grassland; and lack of sensitive species.

Non-native Grassland

Non-native grassland is a dense to sparse cover of annual grasses, often associated with native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Most of the introduced annual species that comprise non-native grassland originated from the Mediterranean region of Europe, an area with a climate similar to that in California and a long history of agriculture. These 2 factors have contributed to the successful invasion and establishment of these species and the replacement of native grasslands by annual-dominated non-native grassland (Jackson 1985).

Non-native grassland covers 5.3 acres on site, primarily in the southwestern portion. Characteristic species include oats (*Avena* sp.), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), soft chess (*Bromus hordaceus*), shortpod mustard (*Hirschfeldia incana*), fennel (*Foeniculum vulgare*), Russian thistle (*Salsola tragus*), and statice (*Limonium perezii*). Overall, the non-native grassland on site is considered low in habitat quality based on small patch size, compacted soils, and high prevalence of non-native broadleaf species that limit foraging potential for raptors.

Eucalyptus Woodland

Eucalyptus woodland is a non-native vegetation community type dominated by gum tree (*Eucalyptus* spp.). Several stands of mature woodland occur primarily in the northern portion of the site. A total of 1.5 acres of eucalyptus woodland was mapped on site.

Non-native Vegetation

Non-native vegetation is a category describing stands of naturalized trees and shrubs (e.g., acacia [Acacia sp.], peppertree [Schinus sp.]), many of which are also used in landscaping. A total of 0.9 acre of non-native vegetation is present as landscaping and other exotics scattered throughout the site.

Intensive Agriculture

Intensive agriculture includes dairies, nurseries, and chicken ranches. Nursery and related facilities represent intensive agriculture in the southeastern portion of the site.



Disturbed Habitat

Disturbed habitat includes land cleared of vegetation (e.g., dirt roads), land containing a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage that removes any capability of providing viable habitat.

Disturbed habitat totals 10.7 acres on site and is comprised of bare earth and scattered plant species typical of highly disturbed land.

Developed Land

Developed land exists where permanent structures and/or pavement has been placed (preventing the growth of vegetation) or where landscaping is clearly tended and maintained. A total of 4.4 acres of developed land is mapped on the project site.

1.4.6 Flora

HELIX identified a total of 91 plant species within the project site during surveys to date, of which 46 (51 percent) are non-native species (Appendix A). Several other non-native ornamental landscape plant species occur in association with the existing home site, nursery, and Aliso Canyon road. The predominance of non-native species is indicative of the high degree of disturbance as a result of previous and active uses.

1.4.7 **Fauna**

A total of 35 animal species have been identified on site during biological surveys, including 3 invertebrates, 26 bird, and 6 mammal species (Appendix B).

1.4.8 Sensitive Vegetation Communities/Habitat Types

Sensitive habitat is defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the CEQA Guidelines. The County maintains a list of sensitive vegetation communities that require compensatory mitigation for unavoidable impacts.

Sensitive vegetation communities mapped on the site include: southern willow scrub, freshwater marsh, native grassland, Diegan coastal sage scrub, and non-native grassland.

1.4.9 Sensitive Plant Species

Sensitive Plants Observed

Two non-listed rare plant species were observed in very low numbers and in limited portions of the site: San Diego sunflower (*Bahiopsis laciniata*) and ashy spike-moss (*Aelaginella cinerascens*). The locations of these species are depicted on Figure 7. The status of these species on the project site is summarized below and within Appendix C.



San Diego sunflower (Bahiopsis laciniata)

Status: --/--; CNPS List 4.2; County List D

Distribution: California, Baja California, and Sonora.

Habitat and Biology: A small shrub that generally occurs in chaparral and coastal sage scrub

below 4,000 feet amsl. Flowering period is February – August.

Status within Survey Area: Four individuals were recorded in DCSS and non-native grassland

adjacent to the eastern boundary of the site.

Ashy spike-moss (Selaginella cinerascens)

Listing: --/--; CNPS List 4.1; County List D

Distribution: Orange and San Diego counties; northwestern Baja California, Mexico

Habitat: Flat mesas in coastal sage scrub and chaparral. A good indicator of site degradation, as it rarely inhabits disturbed soils.

Status within Survey Area: This species occupies three scattered patches within the DCSS in the northern portion of the site.

Sensitive Plants with Potential to Occur

Sensitive plant species with potential to occur on site are included in Appendix C. Refer to Appendix E for an explanation of status codes. With the exception of San Diego sunflower and ashy spike-moss, none of the plant species with potential to occur on site were observed during 2014 rare plant surveys. Existing disturbances strongly reduce the potential for most sensitive plant species to occur. Surface soils are disturbed throughout most of the site, which present unsuitable conditions for most sensitive plants. Further, there is a high prevalence of non-native herbs and other exotic plants that are known to outcompete and displace sensitive plants.

1.4.10 Sensitive Animal Species

Sensitive Animals Observed or Otherwise Detected

Two sensitive animal species were observed or otherwise detected on site and immediately offsite: coastal California gnatcatcher (*Polioptila californica californica*) and southern mule deer (*Odocoileus hemionus fuliginata*). The locations of these species are depicted on Figure 7. The status of these species on the project site is summarized below and within Appendix C.

Southern mule deer (Odocoileus hemionus fuliginata)

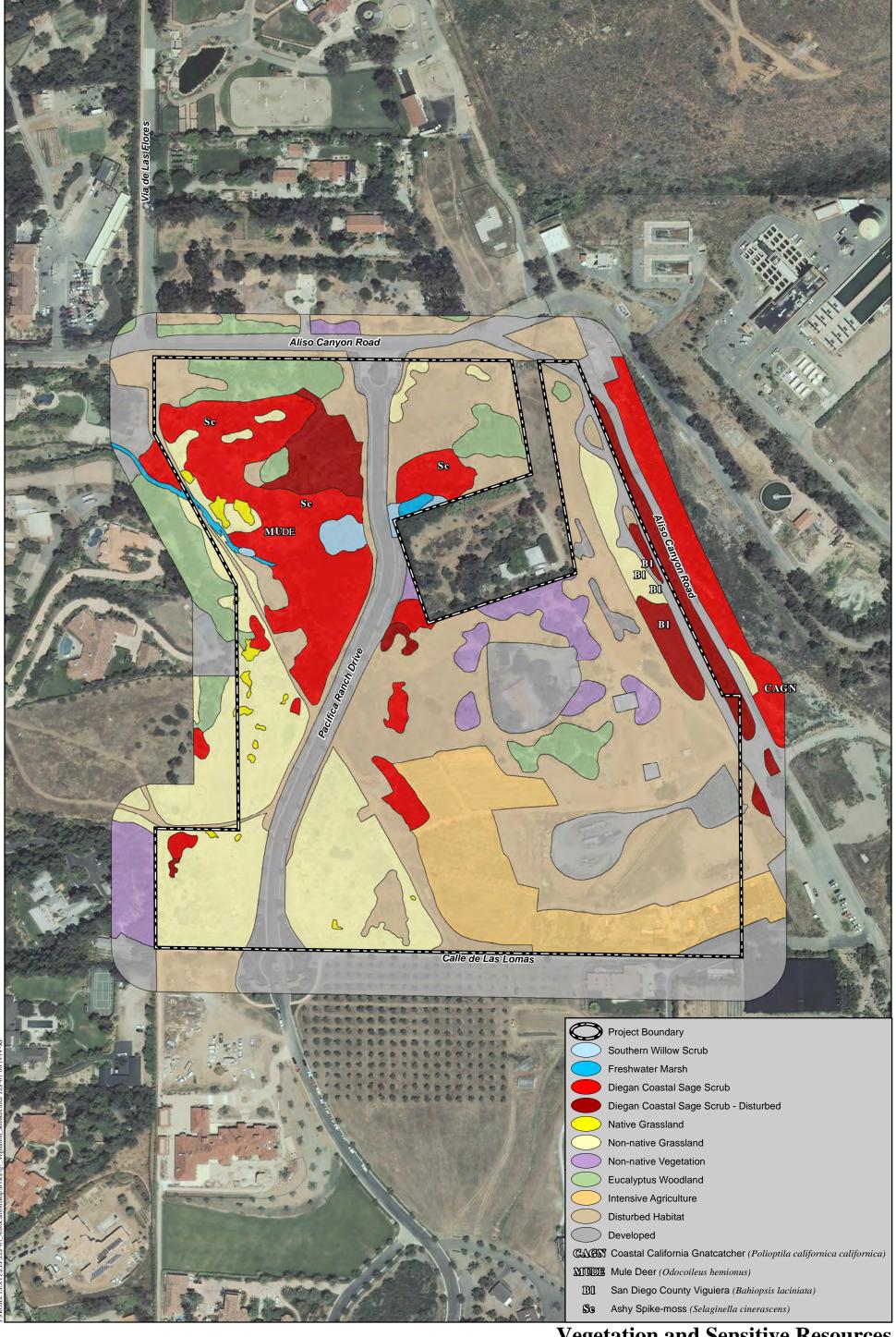
Listing: --/--; County Group 2

Distribution: Southern Riverside County (Tahquitz Valley), south on the coastal slope to the vicinity of San Quintin, Baja California, Mexico.

Habitat: Coastal sage scrub, riparian and montane forests, chaparral, grasslands, croplands, and open areas if there is at least some scrub cover present. Crepuscular activity and movements are along routes that provide the greatest amount of protective cover.

Status within Survey Area: Sign of this species was observed within the DCSS.





Vegetation and Sensitive Resources

Coastal California Gnatcatcher (Polioptila californica californica)

Status: FT/SSC; County Group 1

Distribution: In San Diego County, occurs throughout coastal lowlands. Designated critical habitat for the coastal California gnatcatcher occurs within existing conserved land located to the north toward Elfin Forest and northeast toward Rancho Cielo and Harmony Grove.

Habitat and Biology: Coastal sage scrub, coastal bluff scrub, and coastal sage – chaparral scrub. **Status within Survey Area:** A single male was observed during May 2014 breeding season protocol-level surveys within DCSS immediately east of the eastern boundary of the site. An unpaired individual was also incidentally observed temporarily moving through the site during the April 2014 general biological survey. The DCSS on the project site itself is currently presumed to be unoccupied, but suitable for gnatcatcher use, primarily for temporary foraging, dispersal, and migration. The potential for gnatcatchers to nest within the on-site DCSS is low based on the negative 2014 breeding season survey findings, habitat fragmentation, small patch size, and existing disturbances. Gnatcatchers have a high potential to temporarily use the on-site DCSS during foraging, dispersal, and migration.

Sensitive Animals with Potential to Occur

Sensitive animal species observed or otherwise detected on site, or with potential to occur on site, are included in Appendix D. Refer to Appendix E for an explanation of status codes.

1.4.11 <u>Jurisdictional Waters and Wetlands</u>

A total of 0.36 acre of potential waters of the U.S. subject to USACE jurisdiction were delineated on the project site, including 0.35 acre of potential wetland waters of the U.S. and less than 0.01 acre (0.005 acre) of potential non-wetland waters of the U.S. These resources were found in association with a short reach of an unnamed tributary to the San Dieguito Reservoir, which has connectivity with downstream waters that include the San Elijo Lagoon and Escondido Creek (Table 3; Figure 8).

Table 3 EXISTING WATERS OF THE U.S.		
HABITAT	AREA* (acres)	
WETLANDS		
Southern Willow Scrub	0.24	
Freshwater Marsh	0.11	
NON-WETLAND WUS		
Ephemeral Streambed	< 0.01	
TOTAL	0.36	

^{*}Rounded to nearest one-hundredth.



Potential waters of the State subject to CDFW jurisdiction were estimated to be roughly the same area as potential USACE jurisdiction on site; 0.36 acre total, including 0.35 acre of riparian/wetland-vegetated streambed and 0.01 acre (0.011 acre) of unvegetated streambed (Table 4; Figure 9).

Table 4 EXISTING WATERS OF THE STATE		
HABITAT	AREA* (acres)	
Southern Willow Scrub	0.24	
Freshwater Marsh	0.11	
Ephemeral Streambed	>0.01	
TOTAL	0.36	

^{*}Rounded to nearest one-hundredth.

Areas meeting the criteria to be considered County RPO wetlands on site include the stands of southern willow scrub and freshwater marsh. Altogether these areas total 0.35 acre (Table 5; Figure 10).

Table 5 EXISTING COUNTY RPO WETLANDS		
HABITAT	Area* (acres)	
Southern Willow Scrub	0.24	
Freshwater Marsh	0.11	
TOTAL	0.35	

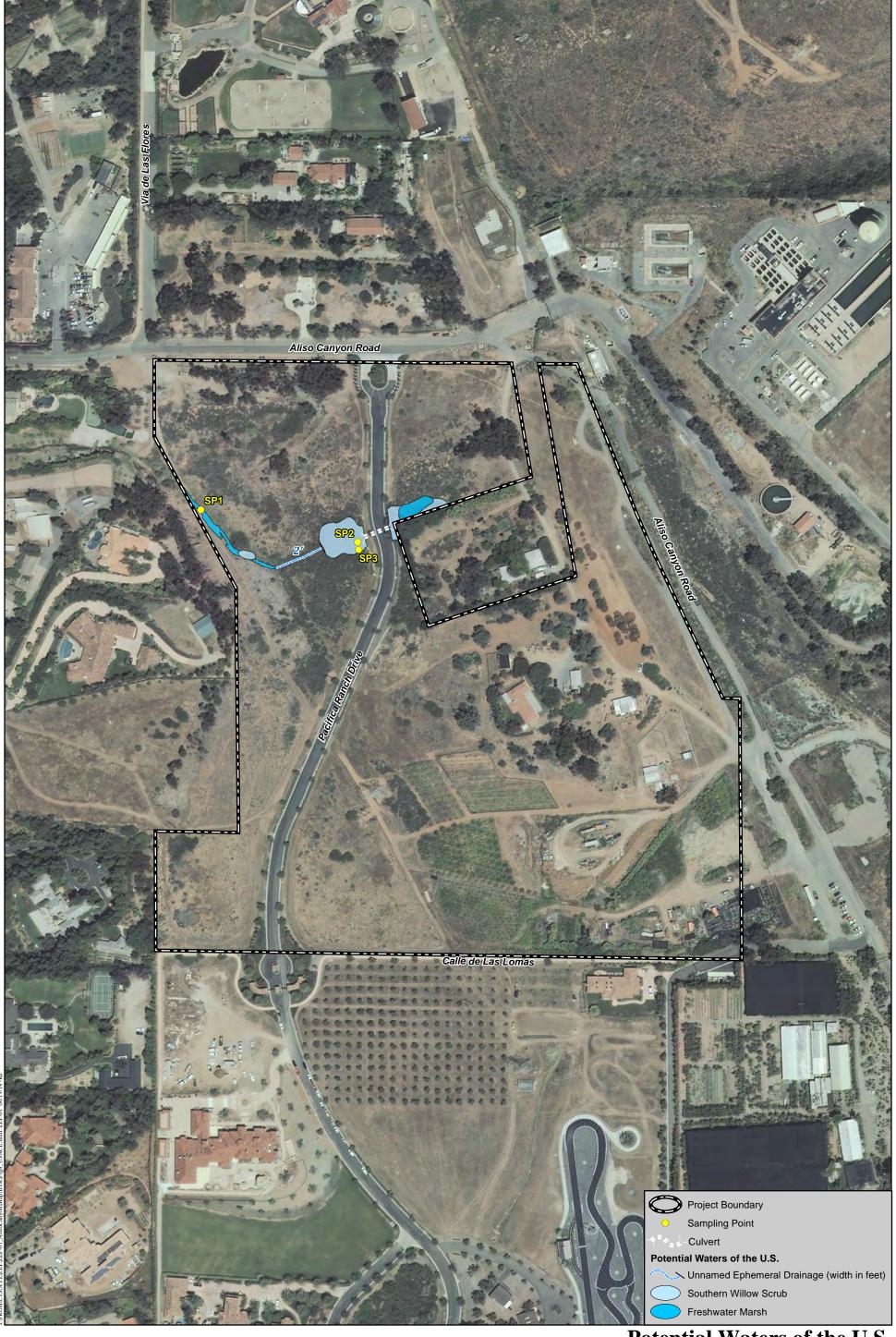
^{*}Rounded to nearest one-hundredth.

The section of ephemeral streambed on site does not qualify as RPO wetland because it does not support hydrophytic vegetation; does not support hydric soil; and is not characterized by a non-soil substratum.

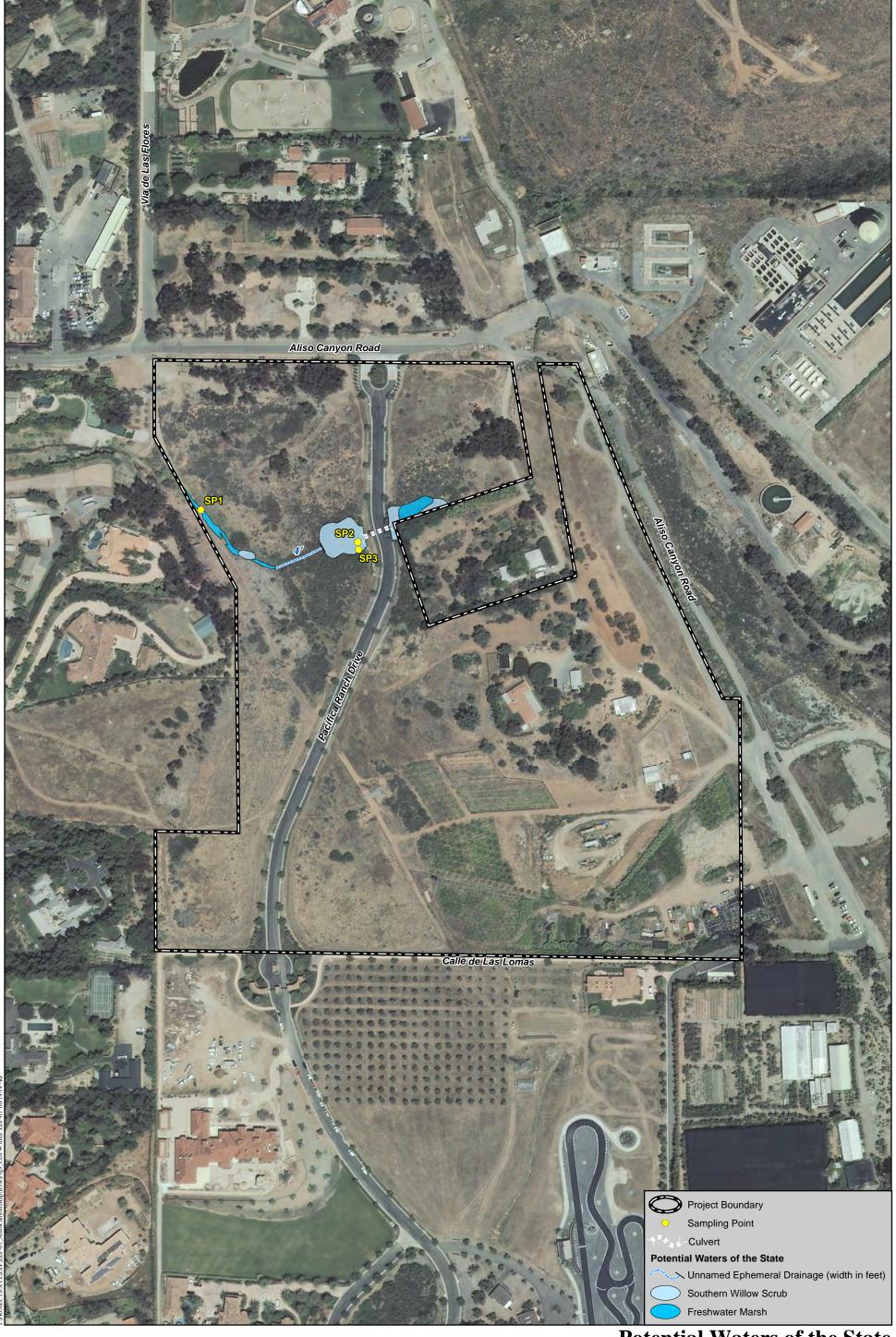
1.4.12 <u>Habitat Connectivity and Wildlife Corridors</u>

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of plants and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of

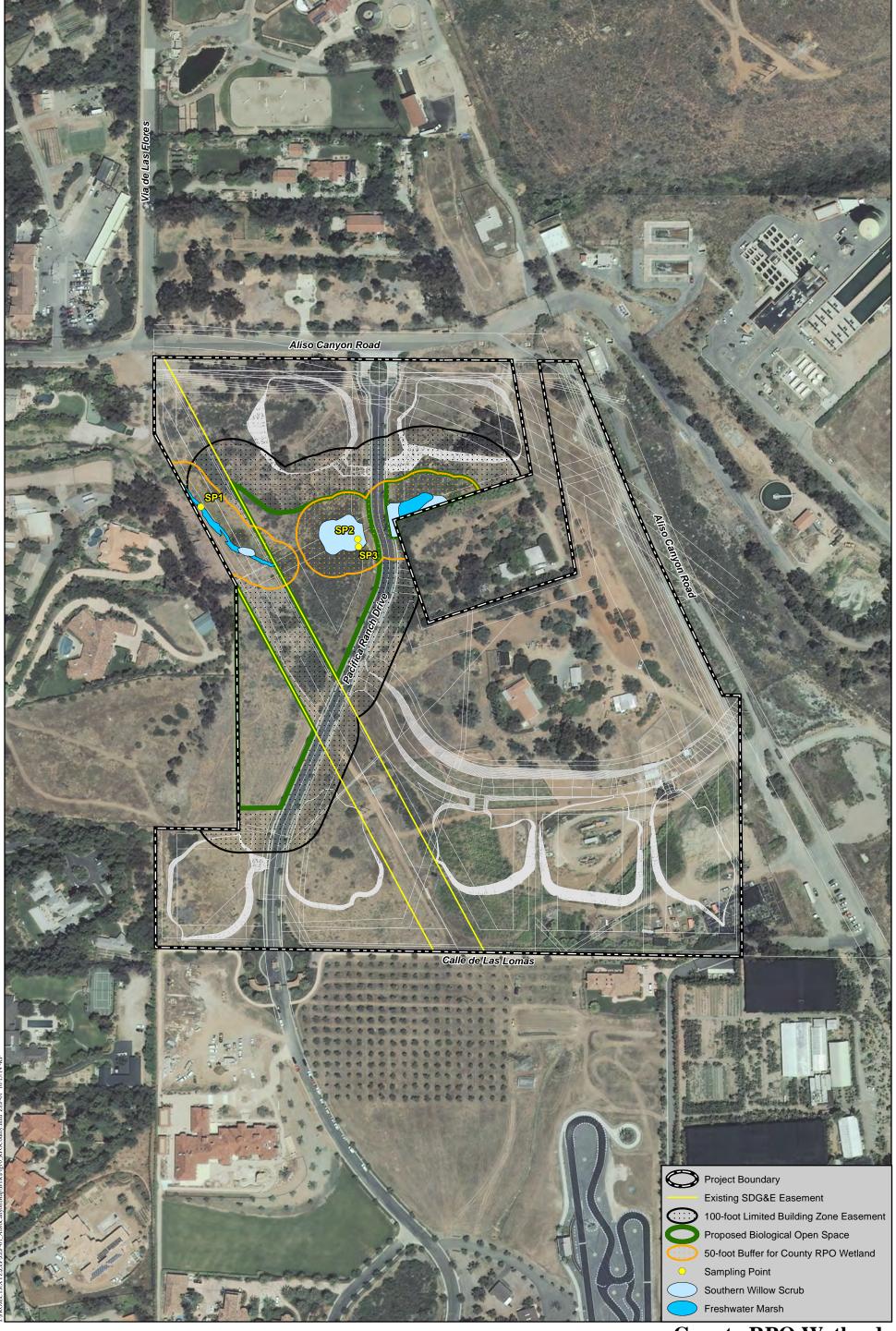




Potential Waters of the U.S.



Potential Waters of the State



County RPO Wetlands

HELIX
Environmental Plant

land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of a fragmented archipelago arrangement of habitat over a linear distance.

Important corridors and linkages have been identified on a local and regional scale throughout the Multiple Habitat Conservation Program (MHCP) and MSCP planning areas in San Diego County. The planning objectives of most corridors and linkages in coastal San Diego County include establishing a connection between the northern and southern regional populations of the coastal California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species.

The project site encompasses disturbed and developed land outside of PAMA in the draft NCMSCP (Figure 4). The site is not identified as being part of a local or regional corridor or linkage, and is situated at the eastern edge of the urbanized Rancho Santa Fe area. The site currently has no direct connectivity to large blocks of habitat and is constrained by existing development on all sides. Habitat on site is limited and significant development barriers exist in the local area for large mammals. Large mammals such as mule deer and coyote may move through the local area, but the site does not function or contribute to a local or regional corridor for large mammals. Large mammal movement through the region likely occurs within the larger habitat blocks (e.g., Elfin Forest, Rancho Cielo, Del Dios) and riparian corridors (e.g., Escondido Creek, San Dieguito River) located further to the northeast, east, and southeast. Local movement of large mammals likely occurs to and from Escondido Creek and San Dieguito River within the Rancho Cielo open space further to the east of the site and east of the Santa Fe Irrigation District facility.

Despite existing development and incompatible land uses, bird movement likely occurs through the local area. Bird movement on the site is most likely to occur within the northern and western portions of the site in association with the unnamed drainage feature and stands of vegetation. Core blocks of habitat occur further to the northeast and east of the site that are designated as Critical Habitat for gnatcatcher by the USFWS and PAMA under the draft NCMSCP. The site is separated from this habitat by existing residential and Santa Fe Irrigation District facility developments. Additional habitat blocks occur further to the south of the site, although existing residential developments separate the site from these areas. Habitat on the site is disturbed and highly fragmented. At best, the site and immediate area could help facilitate local bird movement to and from habitat blocks located further to the northeast and south. Birds with the potential to move through the local area include the coastal California gnatcatcher.

1.5 APPLICABLE REGULATIONS

Biological resources within the project site are subject to regulatory review by federal, State, and local agencies. Under CEQA, impacts associated with a proposed project or program are assessed with regard to significance criteria determined by the CEQA Lead Agency (in this case, the County) pursuant to CEQA Guidelines. Biological resources-related laws and regulations that apply include federal Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), CWA, CEQA, CFG Code, and County RPO.



With respect to the proposed project, the USFWS will be responsible for reviewing issues related to the coastal California gnatcatcher pursuant to the ESA, migratory birds pursuant to the MBTA, and conservation planning in light of the draft NCMSCP. The USACE will be responsible for reviewing issues related to waters of the U.S. pursuant to the CWA, although complete avoidance of waters of the U.S. is currently proposed. The RWQCB will be responsible for reviewing issues related to waters of the State pursuant to the CWA, although complete avoidance of waters of the State is currently proposed. The State Porter-Cologne Water Quality Control Act would not apply as there are no isolated waters of the State on the project site. The CDFW will be responsible for reviewing issues related to jurisdictional streambed and riparian habitat pursuant CFG Code, nesting birds and raptors pursuant to CFG Code, and conservation planning in light of the draft NCMSCP.

The County is the lead agency for the CEQA environmental review process in accordance with state law and local ordinances. During CEQA review, the County will be responsible for reviewing project issues in light of their adopted Guidelines for Determining Significance for Biological Resources and the RPO. The County will also be responsible for reviewing the project with respect to conservation planning in light of their draft NCMSCP.

1.5.1 Federal Government

Administered by the USFWS, the federal ESA provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a 'take' under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." 'Harm' and 'harass' are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

The USFWS identifies critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat.

Sections 7 and 10(a) of the federal ESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major construction activity if it may affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species' use of the site and impacts to USACE jurisdictional areas. Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP). The term "incidental" applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP



demonstrating how the taking would be minimized and how steps taken would ensure the species' survival must be submitted for issuance of Section 10(a) permits.

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to September 1). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all WUS. Permitting for projects filling WUS (including wetlands) is overseen by the USACE under Section 404 of the CWA. Projects could be permitted on an individual basis or be covered under one of several approved Nationwide Permits. Individual Permits are assessed individually based on the type of action, amount of fill, etc. and typically require substantial time (often longer than 6 months) to review and approve, while Nationwide Permits are pre-approved if a project meets appropriate conditions.

1.5.2 State of California

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. California ESA Section 2081 authorizes the CDFW to enter into a memorandum of agreement for the take of listed species for scientific, educational, or management purposes.

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in listed plants. The California ESA follows the NPPA and covers both plants and animals designated as endangered or threatened with extinction. Plants listed as rare under NPPA were also designated rare under the California ESA.

The California Fish and Game Code (Sections 1600 through 1603) requires a CDFW agreement for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement (SAA).

The California Natural Communities Conservation Planning (NCCP) Act of 1991 (Section 2835) allows the CDFW to authorize interim take of species covered by plans in agreement with NCCP



guidelines. A Natural Communities Conservation Program initiated by the State of California focuses on conserving coastal sage scrub, and in concert with the USFWS and the federal ESA, is intended to avoid the need for future federal and state listing of coastal sage scrub dependent species. The County of San Diego became a participant in the NCCP in 1993 for projects located within the planning area for the Coastal Sage Scrub NCCP with the intent to "...provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP process guidelines were established as interim guidelines until formal subregional plans were approved. An NCCP 4(d) take permit is required for the project to demonstrate compliance with the NCCP Act. The draft NCMSCP would be the subregional plan for this portion of the County of San Diego when adopted. The project area is not within the proposed PAMA and, therefore, any conserved areas on site would not become part of the NCMSCP Preserve.

1.5.3 County of San Diego

Habitat Loss Permit Ordinance

The Habitat Loss Permit (HLP) Ordinance was adopted in March of 1994 in response to both the listing of the California gnatcatcher as a federally threatened species, and the adoption of the NCCP Act by the State of California. Pursuant to the Special 4(d) Rule under the ESA, the County is authorized to issue "take permits" for the California gnatcatcher (in the form of Habitat Loss Permits) in lieu of Section 7 or 10(a) Permits typically required from the USFWS. Although issued by the County, the wildlife agencies must concur with the issuance of a HLP for it to become valid as take authorization under the ESA. The HLP Ordinance states that projects must obtain an HLP prior to the issuance of a grading permit, clearing permit or improvement plan if the project will directly or indirectly impact any of several coastal sage scrub habitat types. The Ordinance requires an HLP if CSS or related habitat will be impacted, regardless of whether the site is currently occupied by gnatcatchers. HLPs are not required for projects within the boundaries of the MSCP since take authorization is conveyed to those projects through compliance with the MSCP. HLPs are also not required for projects that have separately obtained Section 7 or 10(a) permits for take of the gnatcatcher.

Approval is based on findings made pursuant to the County's HLP Ordinance (County 1993b), as required by the NCCP Process Guidelines. Findings need to demonstrate that the project's loss of Diegan coastal sage scrub would not exceed the County's 5 percent loss limit. It would also have to demonstrate that the habitat loss would not preclude connectivity between areas of high habitat values, or preclude or prevent the preparation of a subregional NCCP. Additionally, the findings must show that the habitat loss has been minimized and mitigated to the maximum extent practicable in accordance with Section 4.3 of the NCCP Process Guidelines, and that the habitat loss would not appreciably reduce the likelihood of survival and recovery of listed species in the wild. Finally, the habitat loss must be incidental to otherwise lawful activities. An HLP application must be filed with the County if the Draft NCMSCP plan has not been adopted at the time of environmental review for the project. An HLP requires concurrence from USFWS and CDFW.



Resource Protection Ordinance

The County regulates natural resources (among other resources) via the RPO, the regulations of which cover wetlands, wetland buffers, sensitive plants and animals, sensitive habitats, and habitats containing sensitive animals or plants as sensitive biological resources. Wetland habitats are defined per the RPO, as described in Section 1.3.4, above. Sensitive habitat lands are identified by the RPO as lands that "support unique vegetation communities, or habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the CEQA Guidelines." It is the intent of the RPO to increase the preservation and protection of the County's unique topography, natural beauty, biological diversity, and natural and cultural resources.

RPO wetlands are defined according to the RPO as lands having one or more of the following attributes:

- At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained hydric soil; or
- An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

According to the RPO, the following are not considered RPO wetlands:

- Lands which have attribute(s) specified above, solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of PDS determines that they:
 - o Have negligible biological function or value as wetlands;
 - o Are small and geographically isolated from other wetland systems;
 - o Are not vernal pools; and
 - O Do not have substantial or locally important populations of wetland dependent sensitive species.
- Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of PDS:
 - Have negligible biological function or value as wetlands even if restored to the extent feasible; and,
 - O Do not have substantial or locally important populations of wetland dependent sensitive species.

The site contains 0.35 acre of RPO wetlands (Table 5) as southern willow scrub and freshwater marsh, all of which would be avoided, protected with required buffers (wetland buffer and limited building zone), and placed in a biological open space easement.



2.0 PROJECT EFFECTS

Direct impacts are immediate impacts resulting from permanent habitat removal. Direct impacts were quantified by overlaying the limits of project-related impacts on the biological resources map of the site. Indirect impacts are all actions that are not direct removal of habitat, but affect the surrounding biological resources either as a secondary effect of the direct impacts or as the cause of degradation of a biological resource over time. Projects can have a wide variety of indirect impacts depending on the nature of the project, such as edge effects, animal behavioral changes, and errant construction. Cumulative impacts are those caused by numerous projects in the region and their additive effect of multiple direct and indirect impacts to biological resources over time.

The project has been specifically designed to avoid and setback from sensitive resources, including County RPO wetland and adjoining fragments of native grassland and Diegan coastal sage scrub. Proposed developments have been specifically targeted within highly disturbed and developed portions of the site. The proposed pad locations have been sited as far away from sensitive resources as possible. Off-site road improvements have been specifically designed to be restricted within existing paved and disturbed areas to the maximum extent.

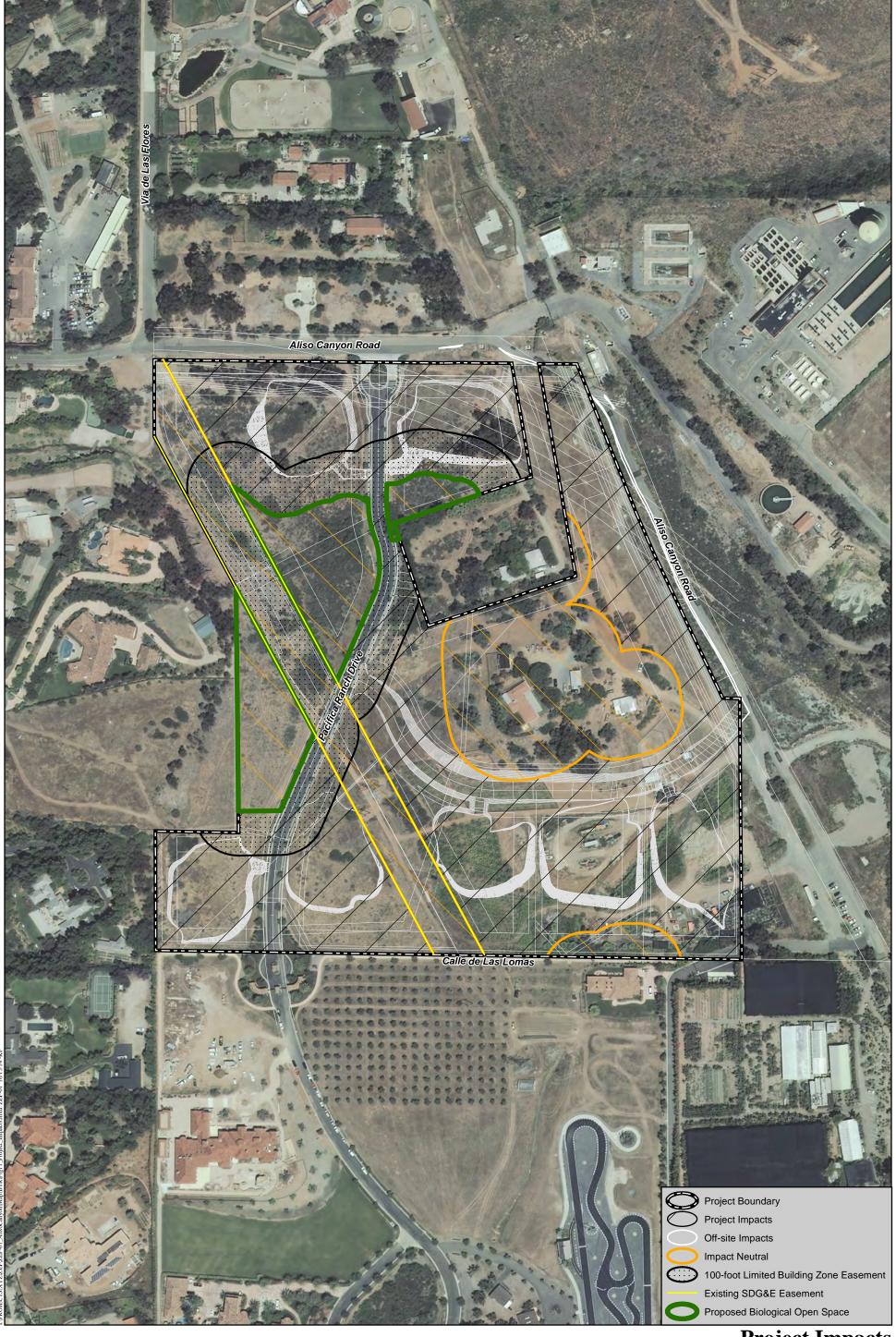
Following County Guidelines, a total of 29.1 acres of the 31.4-acre project site will be considered impacted either by direct physical removal of the habitat or by further fragmenting and isolating the habitat. Of the 29.1 acres considered to be impacted, 8.9 acres of impact neutral area would remain in existing easements or be placed into proposed biological open space and limited building zone easements, whose designations would prevent or limit the amount of physical disturbance of the project and future uses. The remaining 2.2 acres would also be placed in a biological open space easement, which would protect the resources in perpetuity.

Figure 11 depicts the areas on and off site that were considered impacted and impact neutral in accordance with County Guidelines. Impact neutral values represent areas on site contained within RPO wetlands and buffers; proposed biological open space; the existing SDG&E easement; and areas within 100 feet of inhabited structures. Figure 12 depicts the project impacts in relation to existing biological resources on the site. Figure 13 depicts the proposed biological open space on the site.

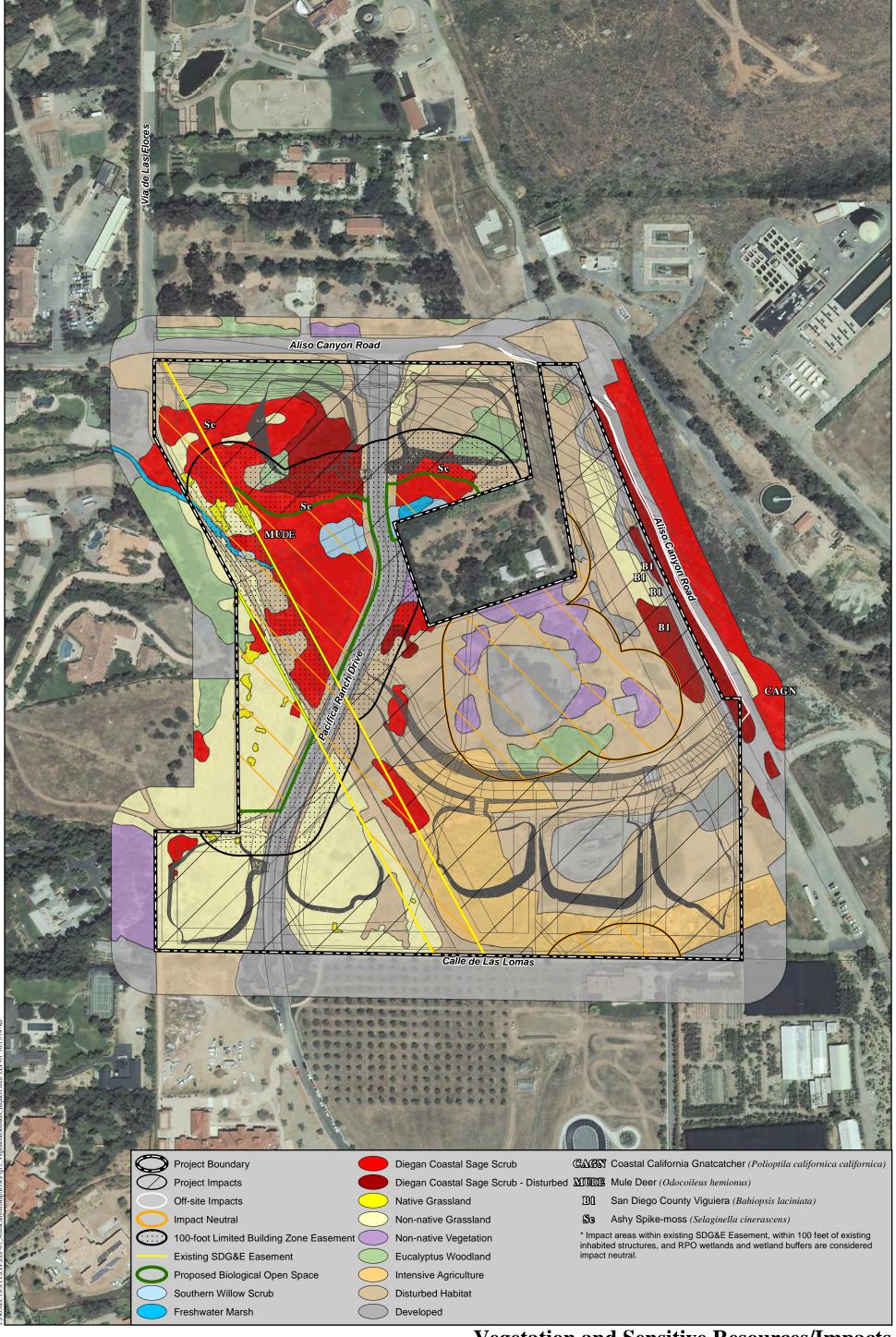
2.1 SPECIAL STATUS PLANT SPECIES

The project would result in impacts to two County List D plants: San Diego sunflower and ashy spike-moss. As explained in further detail below, these impacts would not affect the long-term survival of the species and would be considered less than significant given the very low numbers of individuals present and the fact that these species are relatively common in the region. The loss of on-site habitat that is occupied by these species would be fully compensated, which would further reduce the significance of the impact.

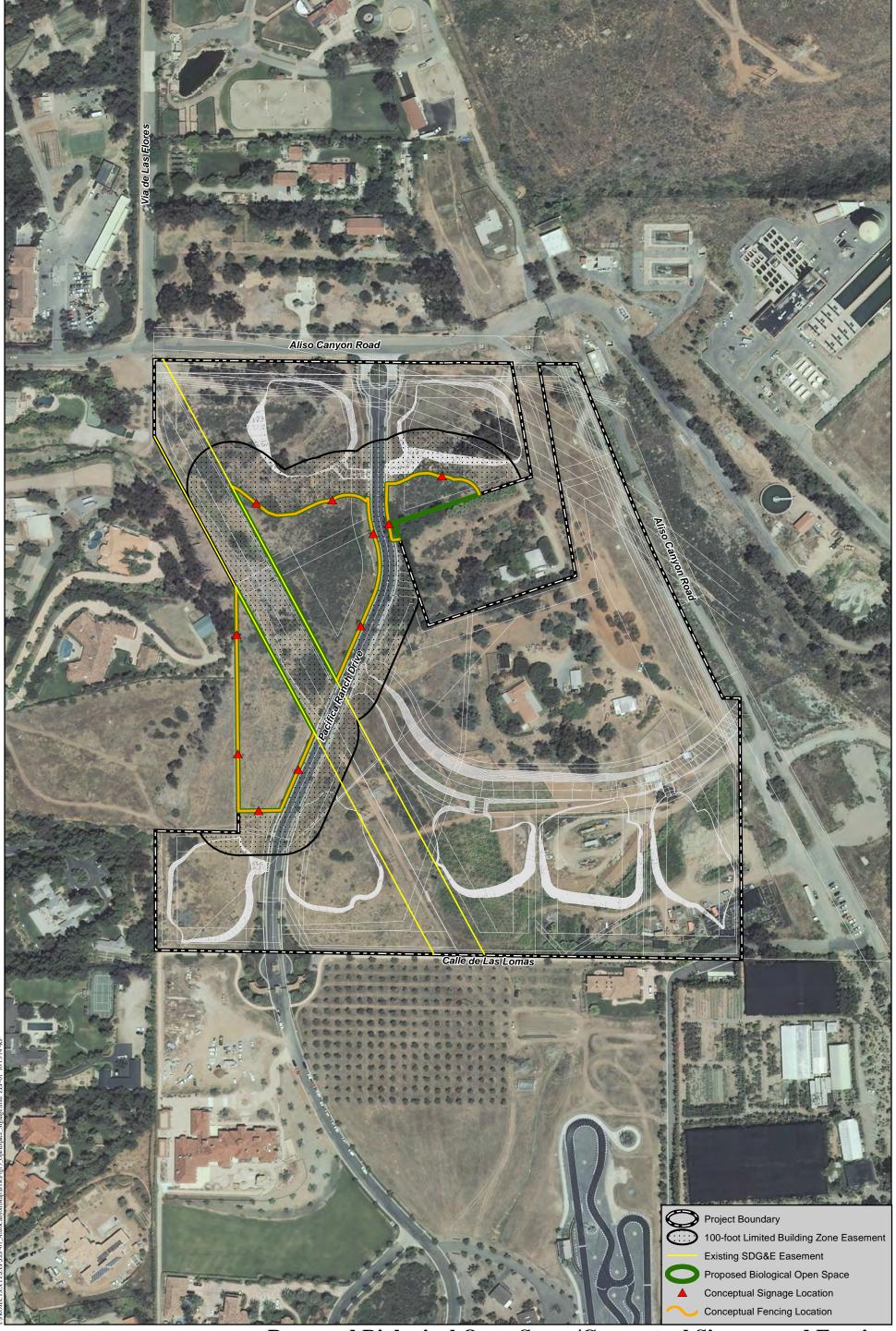




Project Impacts



Vegetation and Sensitive Resources/Impacts



Proposed Biological Open Space/Conceptual Signage and Fencing

ALISO CANYON SUBDIVISION

2.2 SPECIAL STATUS ANIMAL SPECIES

The project could result in impacts to two sensitive animal species: coastal California gnatcatcher, which is a federally threatened, State species of special concern, and County Group 1 species; and, southern mule deer, which is a County Group 1 species. Impacts to the gnatcatcher are expected to be limited to loss of temporary habitat (i.e., temporary foraging, dispersal, and migration habitat) and temporary noise-related impacts during construction activities. Impacts to mule deer are expected to be limited to loss of temporary habitat (i.e., temporary foraging habitat). The potential for sensitive animal species to occur on site is included in Appendix D.

2.3 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITIES

The project has been specifically designed to avoid and setback from existing riparian and wetland habitat; no impacts to riparian and wetland habitat would occur. Impacts from the project on sensitive upland habitats that would require compensatory mitigation include 0.016 acre of non-native grassland, 2.6 acres of Diegan coastal sage scrub, and 3.7 acres of non-native grassland. The project would avoid approximately 0.082 acre of native grassland, 1.0 acre of Diegan coastal sage scrub, and 1.0 acre of non-native grassland that would be placed within biological open space on the site, along with the areas contained within the RPO wetlands and associated buffers. In total, 3.1 acres would be placed within biological open space on the site. Table 6 below provides a summary of project impacts to vegetation communities.

Table 6
IMPACTS TO VEGETATION COMMUNITIES
(acres)**

VEGETATION COMMUNITY/HABITAT*	EXISTING	IMPACTS	OFF-SITE IMPACTS	IMPACT NEUTRAL [‡]
Southern Willow Scrub (63320)	0.24			0.24
Freshwater Marsh (52400)	0.11			0.11
Native Grassland (42100)	0.174	0.016		0.158
Diegan Coastal Sage Scrub (32500)	4.8	2.5	<0.1 (0.065)	2.3
Non-native Grassland (42200)	5.3	3.7		1.6
Eucalyptus Woodland (79100)	1.5	1.1		0.3
Non-native Vegetation (11000)	0.9	0.1		0.9
Intensive Agriculture (18200)	3.2	2.5		0.7
Disturbed Habitat (11300)	10.7	7.2	<0.1 (0.007)	3.4
Developed Land(12000)	4.4	3.3	<0.1 (0.023)	1.2
TOTAL	31.4	20.4	<0.1	10.9

^{*}Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

[‡]Impact neutral values represent areas on site contained within RPO wetlands and buffers, additional biological open space outside of RPO wetlands and buffers, the existing SDG&E easement, and within 100 feet of inhabited structures.



^{**}Upland habitats (excluding native grassland) are rounded to the nearest 0.1 acre wetland habitats are rounded to the nearest 0.01; native grassland habitats are rounded to the nearest 0.001 acre.

2.4 JURISDICTIONAL WETLANDS AND WATERWAYS

As mentioned above, the project has been specifically designed to avoid and setback from riparian and wetland habitat, including potential USACE and CDFW jurisdiction, and County RPO wetlands. The proposed trail segment within the existing SDG&E easement would follow the existing SDG&E access road, and no improvements would be required where the existing access road crosses potential jurisdictional areas. As such, no impacts to jurisdictional wetlands and waterways would occur. Existing jurisdictional resources on site would be protected within biological open space and buffered with a limited building zone easement. Resources within the existing SDG&E easement would be avoided and placed within a limited building zone easement.

2.5 WILDLIFE MOVEMENT AND NURSERY SITES

The project site is not part of a regional corridor and does not serve as a nursery site. The site is not identified as being part of a local or regional corridor or linkage, and is situated at the eastern edge of the urbanized Rancho Santa Fe area, outside of PAMA. The site currently has no direct connectivity to large blocks of habitat and is constrained by existing development to the immediate north, south, east, and west. Habitat on site is limited and significant development barriers exist in the local area for large mammals. Large mammal movement through the region is likely restricted to the larger habitat blocks (e.g., Elfin Forest, Rancho Cielo, Del Dios) and riparian corridors (e.g., Escondido Creek, San Dieguito River) located further to the northeast, east, and southeast. Local movement of large mammals is likely restricted to areas within the Rancho Cielo open space located further to the east of the site and east of the Santa Fe Irrigation District facility. Large mammals such as mule deer and coyote likely utilize this open space as they move to and from Escondido Creek and San Dieguito River. The project site does not contribute to these local and regional corridors for large mammals. At best, large mammals could temporarily stop at the site to rest or forage, as evidenced by the mule deer and coyote sign observed, although the overall quality of the habitat is relatively low.

The site could facilitate bird movement through the local area, including that for the coastal California gnatcatcher. Bird movement on the site is most likely to occur within the northern and western portions in association with the unnamed drainage feature and where significant stands of vegetation and cover occur. The project has been designed to conserve the most significant stands of vegetation and cover for birds on the site, including the most significant stands of Diegan coastal sage scrub that could be used by gnatcatchers. The on-site preserve design would conserve the entirety of the highest quality sage scrub on site, in addition to the unnamed drainage feature and associated riparian/wetland habitat. The preserve design includes a contiguous swath of habitat that stretches from the northeastern portion of the site, through the central portion, and down into the southwestern portion. This design conserves the highest quality linear arrangement of habitat on site and the most likely linear route for bird movement through the site. Bird movement functions, including that which is presumed to exist for the gnatcatcher, would continue on the project site under post-project conditions.



2.6 INDIRECT IMPACTS

Potential indirect impacts from construction noise may occur as a result of project implementation; further described below. Construction-related noise from such sources as clearing and grading would be a temporary impact to wildlife. Breeding birds and mammals may temporarily or permanently leave their territories to avoid disturbances from construction activities, which could lead to reduced reproductive success and increased mortality. Potential short-term noise impacts could result from project construction.

3.0 SPECIAL STATUS SPECIES

3.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the USFWS or CDFW?

Any of the following conditions would be considered significant if:

- A. The project would impact 1 or more individuals of a species listed as federally or state endangered or threatened.
- B. The project would impact an on-site population of a County List A or B plant species, or a County Group 1 animal species, or a species listed as a state Species of Special Concern.
- C. The project would impact the local long-term survival of a County List C or D plant species or a County Group 2 animal species.
- D. The project may impact arroyo toad aestivation, foraging, or breeding habitat.
- E. The project would impact golden eagle habitat.
- F. The project would result in a loss of functional foraging habitat for raptors.
- G. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or supports multiple wildlife species.
- H. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing open space or other natural habitat areas, to levels that would likely harm sensitive species over the long term.
- I. The project would impact occupied burrowing owl habitat.



- J. The project would impact occupied cactus wren habitat, or formerly occupied coastal cactus wren habitat that has been burned by wildfire.
- K. The project would impact occupied Hermes copper butterfly habitat.
- L. The project would impact nesting success of the following sensitive bird species through grading, clearing, fire fuel modification, and/or other noise generating activities such as construction:
 - Coastal cactus wren
 - Coastal California gnatcatcher
 - Least Bell's vireo
 - Southwestern willow flycatcher
 - Tree-nesting raptors
 - Ground-nesting raptors
 - Golden eagle
 - Light-footed clapper rail

3.2 ANALYSIS OF PROJECT EFFECTS

The proposed Project would result in significant impacts under the above guidelines for the following reasons:

3.1.A The project would impact approximately 2.6 acres of Diegan coastal sage scrub habitat that could be used as temporary foraging, dispersal, and/or migration for the federally threatened coastal California gnatcatcher. The on-site habitat is disturbed, relatively small in size, fragmented, and isolated from larger stands in the local area. The potential for gnatcatchers to breed on site is considered low. The site is highly constrained to the immediate north, south, east, and west. Existing developments and incompatible land uses immediately adjacent to the site serve as obstructions to gnatcatcher movement in the local area. Nevertheless, a patchy distribution of vegetation exists amongst the existing obstructions that could facilitate bird movement. The potential for gnatcatchers to temporarily forage, disperse, and/or migrate through the site is considered moderate to high. Breeding season protocol-level surveys were conducted for gnatcatcher in April and May 2014. No gnatcatchers were observed or otherwise detected within the on-site coastal sage scrub during the breeding season protocol surveys. A single male was confirmed to using offsite habitat to the immediate east of the site, although the male was not found to be associated with an active nest or breeding territory. Prior to the protocol surveys, a single unpaired gnatcatcher was observed temporarily moving through the coastal sage scrub located in the central portion of the site during the April 10 general biological survey. Gnatcatchers are known to occur within the expansive core habitat areas located further to the northeast and east of the site. The site is not directly connected with this offsite habitat, but is close enough to reasonably propose that gnatcatchers could temporarily utilize and move through the on-site habitat. The site



does not currently support a breeding territory and would not be expected to support a significant population of gnatcatchers. This is evidenced by the 2014 survey results and the relatively low quality of the habitat on site. Therefore, it can be concluded that the project would impact coastal sage scrub habitat that is likely used by the gnatcatcher for non-breeding foraging, dispersal, and/or migration functions during portions of the year. These impacts would be considered significant under County Guideline 3.1.A.

- 3.1.B Project impacts to the County Group 1 and State species of special concern, coastal California gnatcatcher, are addressed above within County Guideline 3.1.A. The project would result in the loss of potential nesting and foraging habitat for Cooper's hawk, which is a County Group 1 species not observed but determined to have a high potential to occur. Cooper's hawk could nest within the woodland habitat and larger mature trees on site. These species could use also use the site for foraging. Impacts to County Group 1 species would be significant under County Guideline 3.1.B.
- 3.1.F The project site supports marginal foraging habitat for raptors common to the local area such as red-tailed hawk, Cooper's hawk, and great-horned owl (*Bubo virginianus*). Approximately 0.082 acre of native grassland and 1.0 acre of non-native grassland that could be used by foraging raptors would be avoided and placed within biological open space on the site. The project would result in the loss of sparse scrub and grassland habitat that provides marginal foraging habitat for these raptors. Impacts would be significant under County Guideline 3.1.F.
- 3.1.L Noise from such sources as clearing and grading could result in an impact to wildlife. Noise-related impacts would be considered significant if sensitive species (such as raptors) were displaced from their nests and failed to breed. Raptors or other sensitive bird species nesting within any area impacted by noise exceeding 60 decibels (dB) or ambient could be significantly impacted. If tree-nesting raptors are nesting within 500 feet of the impact area, or sensitive passerines such as the coastal California gnatcatcher are nesting within 300 feet of the impact area, effects resulting from construction noise would be significant according to County Guideline 3.1.L. The recommended mitigation measure would reduce this impact to below a level of significance.

The project would not result in significant impacts under the above guidelines for the following reasons:

3.1.C The project would impact habitat temporarily used by the County Group 2 animal, southern mule deer. Given the small size, rural residential setting, and exposure to existing disturbances and developments, mule deer are not likely to use the site for permanent, live-in habitat. The limited sign observed on site suggests that mule deer occasionally forage opportunistically on the site. The site would not be expected to support a nursery site or significant population of mule deer. While mule deer can occur throughout the local area, there is no regional or significant movement corridor through the project site itself. Expansive preserve lands occur further to the northeast and east that serve as high quality temporary and live-in habitat for the species. Therefore, the project would not affect the long-term survival of the species. In addition, the project would impact habitat occupied by very low numbers of San Diego sunflower and ashy



spike-moss, which are County List D plants. These species are relatively common in the region. Core populations are protected in existing preserve lands throughout San Diego County. The project's impacts on the species would not affect the long-term survival of these species. Impacts are to County Group 2 animals and County List D plants are considered less than significant.

- 3.1.D The site contains no habitat suitable for the arroyo toad. The species is believed to have been extirpated from the local area and the unnamed drainage feature on site does not provide suitable habitat.
- 3.1.E The nearest known sighting of golden eagle is 2.5 miles due east of the project site. The site does not contain nesting habitat and it is not within any known golden eagle territory. The surrounding area is urbanized and nesting in the vicinity is unlikely. Therefore, the project would have no significant impact on golden eagle habitat.
- 3.1.G The project site is not part of a core wildlife area of 500 acres of wildlife habitat or more.
- 3.1.H. The project site does not abut existing preserve areas or large blocks of core habitat. The project proposes low-density rural residential uses and would not introduce high levels of disturbance to the local area. Potentially significant indirect impacts to sensitive species resulting from human access, domestic animals, exotic species, and lighting would be avoided through the following design measures: (1) permanent fencing shall be installed around biological open space, and signs precluding access shall be posted; (2) only non-invasive plant species would be included in the landscape plan for the site (species not listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council [Cal-IPC; 2006]); and (3) all project-related lighting would be required to adhere to Division 9 of the San Diego County Light Pollution Code. Lighting within the proposed project footprint adjacent to undeveloped habitat would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from these areas. Under County Guideline 3.1.H, no significant impact to sensitive species resulting from indirect impacts from human access, domestic animals, exotic species, or lighting would occur over the long term. Potential indirect impacts from construction noise are discussed under Guideline 3.1.L.
- 3.1.I The project site does not support occupied burrowing owl habitat.
- 3.1.J The project site does not contain suitable habitat for the coastal cactus wren.
- 3.1.K The project site does not contain Hermes copper butterfly habitat.

3.3 CUMULATIVE IMPACT ANALYSIS

The area of consideration for cumulative biological projects impacts was restricted to projects occurring within a one-mile radius of the project site. The cumulative study area was chosen because it includes areas with similar biological resources as the project site, as well as capturing the watershed for the site. It also includes the nearest draft NCMSCP PAMA areas and open space associated with Escondido Creek and the Elfin Forest area to the north; Rancho Cielo to the east; and San Dieguito River, Crosby, and other Rancho Santa Fe areas to the south. The sphere of consideration includes areas within a reasonable distance from the project site that may



have a biologically-based connection to the site in terms of habitat, connectivity, and development in the watershed. A total of 21 projects (including the proposed project) were reviewed for this cumulative analysis (Table 7).

Table 7
CUMULATIVE IMPACTS TO BIOLOGICAL RESOURCES

2517			RESOURCE*					
MAP REFERENCE	PROJECT	PROJECT NAME	C	SS	NG	÷	NI	NG
NO.	NUMBER	TROUBET WIND	Impacts (I)	Mitigation (M)	I	M	I	M
1	PDS2004-3100- 5348 ¹	Starwood /Santa Fe Valley Partners	547.7	767.1	3.0	21.6	204.1	47.2
2	PDS2004-3100- 5349 ¹	Crosby Estates Golf And Tennis Club Village	547.7	767.1	3.0	21.6	204.1	47.2
3	PDS2003-3200- 20790 ²	Hearthside Homes Inc./Stp Minor Dev						
4	PDS2005-3501-03- 087-01 ³	Crosby Estate Swim Tennis Club Villas						
5	PDS2006-3000-06- 065 ⁴	Old Course Road Guardhouse Ad Fencing						
6	PDS2006-3501-04- 001-03 ³	Hearthside Homes Inc.						
7	PDS2004-3500-01- 076	Cielo Fire Station Site Plan	126.5	466.9				
8	PDS2001-3500-01- 062	Rancho Cielo Village	126.5	466.9				
9	PDS2005-3400-05- 008 ⁴	Verizon Wireless - Del Dios						
10	PDS2006-3710-06- 0002 ⁵	Cielo Plaza B/C						
11	PDS2005-3710-05- 0223 ⁵	Via Del Charro B/C						
12	PDS2007-3813-07- 002 ¹	Santa Fe Valley Spa07-002	547.7	767.1	3.0	21.6	204.1	47.2
13	PDS2011-3500-11- 014 ¹	Tor Investments, Map 11-012	547.7	767.1	3.0	21.6	204.1	47.2



Table 7 (cont.) CUMULATIVE IMPACTS TO BIOLOGICAL RESOURCES

MAD			RESOURCE*					
MAP REFERENCE	PROJECT	PROJECT NAME	C	SS	NG	}	N	NG
NO.	NUMBER	PROJECT NAME	Impacts (I)	Mitigation (M)	I	M	I	M
14	PDS2005-3813-05- 004 ⁶	Rancho Cielo, Spa, Rez, Tm, Stp, Et Al	126.5	466.9				
15	PDS2013- LDGRMJ-00025 ¹	Crosby Enclave	547.7	767.1	3.0	21.6	204.1	47.2
16	PDS2007-3200- 21065 ⁷	Levie TPM/TPM/ 2 Lots	0.33	0.50				1
17	PDS2010-3100- 5565 ⁸	Ciello Village LLC Map 09-039 Tm 5565						
18	PDS2013-MUP- 11-023W2 ⁴	AT&T Badger Water Tank Modification						ļ
19	PDS2013-MUP- 13-001 ⁸	HHC Investors, LLC						
20	PDS2007-3401-05- 008-02 ⁴	Del Dios Hwy/Zap05-008 W1 Zap Mod						
21 (Proposed Project)	PDS2014-TM- 5589	Aliso Canyon	2.6	5.2	0.016	0.0	3.7	1.9

^{*}CSS=coastal sage scrub, NG=native grassland, NNG=non-native grassland

The project could contribute to the cumulative impact on the coastal California gnatcatcher and Cooper's hawk, which are both County Group 1 animals, in addition to raptors with the potential to nest and forage over the site. Project-level impacts would be mitigated through the implementation of avoidance measures and habitat based compensatory mitigation, including establishment of on-site biological open space and purchase of offsite habitat. Implementation of these measures would reduce the project's contribution on the cumulative impact to less than significant levels.



¹ Reliance on the Santa Fe Valley Specific Plan EIR

² Exempt from CEQA using 15182

³ Ministerial permit, no environmental

⁴ Exempt from CEQA using 15303

⁵ Exempt from CEQA using 15305

⁶ Reliance on the Rancho Cielo Specific Plan EIR

⁷ Mitigated Negative Declaration for TPM 21065

⁸ Exempt from CEQA using 15301

3.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

Impact 3.4.1 The coastal California gnatcatcher was determined to be present within offsite habitat located to the immediate east of the site. The species has a high potential to temporarily use on-site habitat for foraging and other non-breeding activities. Clearing and grubbing activities during the coastal California gnatcatcher breeding season could potentially affect breeding gnatcatchers in the unexpected event that the site or immediate vicinity becomes occupied with an active nest.

Mitigation Measure (MM) 3.4.1

No grading, clearing, or blasting shall occur within 300 feet of occupied Diegan coastal sage scrub during the breeding season of the coastal California gnatcatcher (March 1 – August 31). As such, all grading permits, improvement plans, and the final map shall state the same. If clearing, grading, or blasting would occur during the breeding season for the gnatcatcher, a pre-construction survey shall be conducted to determine whether gnatcatchers occur within the areas impacted by noise. To avoid take under the ESA, impacts shall be avoided within 300 feet of nesting gnatcatchers. If there are no gnatcatchers nesting (includes nest building or other breeding/nesting behavior) within this area, grading, clearing, or blasting shall be allowed to proceed. However, if any gnatcatchers are observed nesting or displaying breeding/nesting behavior within the area, construction shall be postponed until all nesting (or breeding/nesting behavior) has ceased or until after August 31.

- Impact 3.4.2 Project impacts on functional raptor foraging habitat would be 0.016 acre of native grassland and 3.7 acres of non-native grassland.
- MM 3.4.2a Mitigation for impacts to native grassland shall occur at a ratio of 3:1 through the purchase of off-site Diegan coastal sage scrub credits containing native grassland components at the Buena Creek Conservation Bank or Red Mountain Mitigation Bank in consultation with the County and resource agencies prior to issuance of a grading permit. Mitigation for impacts to non-native grassland shall occur at a 0.5:1 ratio through the purchase of 1.9 acres of off-site non-native grassland credits at an approved mitigation bank in consultation with the County and resource agencies prior to issuance of a grading permit.
- MM 3.4.2b In order to protect the proposed open space easement from entry, or disturbance, permanent fencing shall be installed. Open space fencing shall be placed along the biological open space boundary as indicated on the approved Biological Resources Report, Figure 13. The fencing design shall consist of split rail or wire. The applicant shall install the fencing as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor that the open space fencing has been installed at the open space easement boundary. Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the fencing shall be placed. PDS shall review the photos and statement for compliance with this condition.



MM 3.4.2c In order to protect the proposed open space easement from entry, informational signs shall be installed. Open space signs shall be placed along the biological open space boundary of lots(s) 1, 2, and 7 as indicated on the approved Biological Resources Report, Figure 13. The signs must be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than 3 feet in height from the ground surface, and must state the following:

Sensitive Environmental Resources
Disturbance beyond this point is restricted by easement.
Information:
Contact the County of San Diego,
Planning & Development Services
Reference: PDS2014-TM-5589

The applicant shall install the signs as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor, that the open space signs have been installed at the boundary of the open space easement(s). Prior to the approval of the Final Map and prior to the approval of any plan and issuance of any permit, the open space signs shall be installed. The PDS shall review the photos and statement for compliance with this condition. If all biological mitigation is completed off site, no signs will be required.

- Impact 3.4.3 Construction-related noise may significantly impact sensitive bird species, including raptors, that may be nesting within an area such that construction noise at the nest exceeds 60 dB.
- MM 3.4.3 No grubbing, clearing, or grading within 500 feet of active tree-nesting raptor (i.e., Cooper's hawk, red-tailed hawk) habitat (January 15 to July 15) shall occur. As such, all grading permits, improvement plans, and the final map shall state the same. If grubbing, clearing, or grading would occur during the raptor breeding season, a pre-construction survey shall be conducted to determine whether these species occur within the areas impacted by noise. If there are no raptors nesting (includes nest building or other breeding/nesting behavior) within this area, development shall be allowed to proceed. However, if raptors are observed nesting or displaying breeding/nesting behavior within the area, construction shall (1) be postponed until all nesting (or breeding/nesting behavior) has ceased or until after July 15; or (2) a temporary noise barrier or berm shall be constructed at the edge of the development footprint to ensure that noise levels are reduced to below 60 dB or ambient. Alternatively, the use of construction equipment could be scheduled to keep noise levels below 60 dB or ambient in lieu of, or in concert with, a wall or other noise barrier.

3.5 CONCLUSIONS

Implementation of the project could result in significant impacts to a single County Group 1 animal, two County Group 2 animals, and raptors with the potential to nest and forage over the



site. Potential significant impacts could result from direct disturbance, loss of foraging habitat, and noise. The recommended mitigation measures would reduce this impact to below a level of significance.

4.0 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITY

4.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the USFWS or CDFW?

Any of the following conditions would be considered significant if:

- A. Project-related grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as listed in Table 5 in the County Guidelines for Determining Significance [County 2010b], excluding those without a mitigation ratio) on or off the project site.
- B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by the USACE, CDFW, and County: vegetation removal; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; road crossing construction; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.
- C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.
- D. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing open space or other natural habitat areas, to levels that would likely harm sensitive habitats over the long term.
- E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

4.2 ANALYSIS OF PROJECT EFFECTS

The project would result in significant impacts under the above guidelines for the following reasons:

4.1.A The project has been specifically designed to avoid and setback from sensitive riparian and wetland habitat on site; no impacts to native riparian and wetland habitat would occur. Project impacts on sensitive upland habitats include 0.016 acre of native



grassland, 2.6 acres of Diegan coastal sage scrub, and 3.7 acres of non-native grassland. Impacts would be significant according to County Guideline 4.1.A.

The project would not result in significant impacts under the above guidelines for the following reasons:

- 4.1.B The project has been specifically designed to avoid and setback from jurisdictional wetlands and/or riparian habitats as defined by the USACE, CDFW, and County on site. Under County Guideline 4.1.B, no significant impact would occur.
- 4.1.C No groundwater withdrawals or activities that could result in lowering of the groundwater table are proposed. Under County Guideline 4.1.C, no significant impact would occur.
- 4.1.D The project would not result in indirect impacts from the spread of non-native plant species during construction, as non-native species are already prevalent throughout the project site, comprising 50% of the species observed on site. To avoid potentially significant impacts from plants installed as part of the project, only non-invasive plant species would be included in the landscape plan for the site (species not listed on the California Invasive Plant Council [Cal-IPC; 2006]). Under County Guideline 4.1.D, no significant impact would occur.
- 4.1.E The project provides minimum 50-foot buffers around all preserved wetlands on site. Under County Guideline 4.1.E, no significant impact would occur.

4.3 CUMULATIVE IMPACT ANALYSIS

The project would contribute to the cumulative impact on sensitive upland communities. The project would mitigate project-level impacts in accordance with County and regulatory agency requirements. Impacts would be fully mitigated in-kind at County-approved ratios through offsite purchase of credits at an approved mitigation bank, thus providing long-term conservation value. As the project would be in conformance with County guidelines and mitigation ratios, the project's contribution to cumulative impacts to sensitive vegetation communities would be less than significant.

4.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

- Impact 4.4.1 Project impacts on sensitive upland habitats include 0.016 acre of native grassland, 2.6 acres of Diegan coastal sage scrub, and 3.7 acres of non-native grassland. Impacts to native grassland and non-native grassland shall be mitigated in accordance with MM 3.4.2a-c.
- MM 4.4.1 Impacts to 2.6 acres of Diegan coastal sage scrub shall be mitigated at a 2:1 ratio through purchase of 5.2 acres of off-site Diegan coastal sage scrub credits containing native grassland components at the Buena Creek Conservation Bank or Red Mountain Mitigation Bank in consultation with the County and resource agencies prior to issuance of a grading permit.



4.5 CONCLUSION

Implementation of the project would result in significant impacts to sensitive natural communities; however, a combination of avoidance through project design and mitigation measures for loss of habitat resulting from the project would reduce impacts to below a level of significance. Mitigation is proposed at ratios consistent with those required by the County and resource agencies.

5.0 JURISDICTIONAL WETLANDS AND WATERWAYS

5.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

5.1.A Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?

5.2 ANALYSIS OF PROJECT EFFECTS

As previously stated, the project has been specifically designed to avoid and setback from jurisdictional wetlands and/or riparian habitats as defined by the USACE, CDFW, and County on site. The proposed trail segment within the existing SDG&E easement would follow the existing SDG&E access road and no improvements would be required where the existing access road crosses potential jurisdictional areas. This includes federally protected wetlands as defined by Section 404 of the CWA. No significant impact would occur.

5.3 CUMULATIVE IMPACT ANALYSIS

The project would have no contribution toward the cumulative impact.

5.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

No significant impacts would occur and no mitigation is required.

5.5 CONCLUSION

No significant impacts would occur and no mitigation is required.



6.0 WILDLIFE MOVEMENT AND NURSERY SITES

6.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Any of the following conditions would be considered significant if:

- A. The project would impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- B. The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
- C. The project would create artificial wildlife corridors that do not follow natural movement patterns.
- D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
- E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
- F. The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage.

6.2 ANALYSIS OF PROJECT EFFECTS

The project would not result in significant impacts under the above guidelines for the following reasons:

6.1.A The project site is not part of a regional corridor and does not serve as a nursery site. The site is not identified as being part of a local or regional corridor or linkage, and is situated at the eastern edge of the urbanized Rancho Santa Fe area, outside of future PAMA (Figure 4). The site currently has no direct connectivity to large blocks of habitat and is constrained by existing development to the immediate north, south, east, and west. Habitat on site is limited and significant development barriers exist in the local area for large mammals. Large mammal movement through the region is likely restricted to the larger habitat blocks (e.g., Elfin Forest, Rancho Cielo, and Del Dios) and riparian corridors (e.g., Escondido Creek, San Dieguito River) located further to the northeast,



east, and southeast. Local movement of large mammals is likely restricted to areas within the Rancho Cielo open space located further to the east of the site and east of the Santa Fe Irrigation District facility. Large mammals such as mule deer and coyote likely utilize this open space as they move to and from Escondido Creek and San Dieguito River. The project site does not by itself function or contribute to local or regional corridors or linkage areas for large mammals. At best, large mammals could temporarily stop at the site to rest or forage, as evidenced by the mule deer and coyote sign observed, although the overall quality of the habitat is relatively low. However, the site could facilitate bird movement through the local area, including that for the coastal California gnatcatcher. Bird movement on the site is most likely to occur within the northern and western portions in association with the unnamed drainage feature and where significant stands of vegetation and cover occur. The patchy arrangement of habitat on site does not provide a contiguous canopy of vegetative cover and does not serve as live-in habitat due to the lack of high quality resources. The project has been designed to conserve the most significant stands of vegetation and cover for birds on the site, including the most significant stands of Diegan coastal sage scrub that could be used by gnatcatchers and other birds temporarily moving through the local area, to and from high quality habitat located off site to the northeast and east. The on-site preserve design would conserve the entirety of the highest quality sage scrub on site, in addition to the unnamed drainage feature and associated riparian/wetland habitat. The preserve design includes a contiguous swath of habitat that stretches from the northeastern portion of the site, through the central portion, and down into the southwestern portion. This design conserves the highest quality linear arrangement of habitat on site and the most likely linear route for bird movement through the site. Bird movement functions, including that which is presumed to exist for the gnatcatcher, would continue on the project site under post-project conditions. Therefore, project implementation would not impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction. No significant impact would occur under County Guideline 6.1.A.

The project site is not identified as being part of a local or regional corridor or linkage, 6.1.B and is situated at the eastern edge of the urbanized Rancho Santa Fe area, outside of future PAMA. The site currently has no direct connectivity to large blocks of habitat and is constrained by existing development to the immediate north, south, east, and west. The project site is not located along the most likely path of movement and the project would not substantially interfere with connectivity between blocks of habitat located further to the northeast, east, and south. The project would not potentially block or substantially interfere with a local or regional wildlife corridor or linkage. However, the site could facilitate bird movement through the local area, including that for the coastal California gnatcatcher. The project has been designed to conserve the most significant stands of vegetation and cover for birds on the site, including the most significant stands of Diegan coastal sage scrub that could be used by gnatcatchers and other birds temporarily moving through the local area, to and from high quality habitat located off site to the northeast and east. The on-site preserve design would conserve the entirety of the highest quality sage scrub on site. The preserve design includes a contiguous swath of habitat that stretches from the northeastern portion of the site, through the central portion, and down This design conserves the highest quality linear into the southwestern portion.



- arrangement of habitat on site and the most likely linear route for bird movement through the site. Bird movement functions, including that which is presumed to exist for the gnatcatcher, would continue on the project site under post-project conditions.
- 6.1.C The project would not create artificial wildlife corridors. The project site is not identified as being part of a local or regional corridor or linkage, and is situated at the eastern edge of the urbanized Rancho Santa Fe area, outside of future PAMA. There are no existing corridors on site due to surrounding development. The site could facilitate local bird movement, including that for the coastal California gnatcatcher, but not as a function of a linear corridor or linkage. The site is not part of an intact or fragmented linear arrangement of habitat. The resources in the local area do not suggest the presence of an archipelago or stepping stone linkage. The project has been designed to conserve the most significant stands of vegetation and cover for birds on the site, including the most significant stands of sage scrub that could be used by gnatcatchers temporarily moving through the local area. The on-site preserve design would conserve the highest quality sage scrub as one relatively contiguous swath traversing the site diagonally and following natural topography and vegetative cover. This design conserves the highest quality linear arrangement of habitat on site and the most likely linear route for bird movement through the site. The project does not create an artificial wildlife corridor and bird movement functions would continue on the project site under post-project conditions. Under County Guideline 6.1.C, no significant impact would occur.
- 6.1.D As previously discussed, all project-related lighting would be required to adhere to Division 9 of the San Diego County Light Pollution Code. Project lighting adjacent to undeveloped habitat would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from such habitat. Additionally, the site is located within an urbanized area and is not part of a regional corridor or linkage. Ambient noise levels are expected to be relatively high as a result of activities associated with the existing transportation, residential, and agricultural uses. The project proposes an additional 7 lots to support rural residential uses. The project would not introduce a high volume of traffic, residents, or other noise-generating elements to the local area. As such, the effects of noise generated from project operation are expected to be minimal in relation to pre-project conditions. Biological open space on site would be buffered from proposed developments. Under County Guideline 6.1.D, no significant impact to wildlife corridors or linkages resulting from lighting or noise would occur.
- 6.1.E The project site is not identified as being part of a local or regional corridor or linkage; therefore, the project would have no effect on maintaining an adequate width of existing wildlife corridors or linkages. Further, the project site does not by itself support or contribute to an already narrow corridor or linkage; therefore, the project would not further constrain an already narrow corridor. As discussed above, the site is situated outside of future PAMA at the edge of the urbanized Rancho Santa Fe area. There are no existing corridors on site due to surrounding development. The site could facilitate local bird movement, including that for the coastal California gnatcatcher, but not as a function of a linear corridor or linkage. The site is not part of an intact or fragmented linear arrangement of habitat. The resources in the local area do not suggest the presence of an



archipelago or stepping stone linkage. The on-site preserve design would conserve the highest quality sage scrub as one relatively contiguous swath traversing the site diagonally and following natural topography and vegetative cover. This design conserves the highest quality linear arrangement of habitat on site and the most likely linear route for bird movement through the site. The project would preserve the highest quality, intact habitat on site with respect to temporary habitat for birds that could forage, disperse, and migrate through the site and local area. Under County Guideline 6.1.E, no significant impact would occur.

6.1.F The project would not affect visual continuity within wildlife corridors or linkages, as none exist on or adjacent to the site. Visual continuity through the on site preserve will be maintained across the site. Under County Guideline 6.1.F, no significant impact would occur.

6.3 CUMULATIVE IMPACT ANALYSIS

The project would have no contribution toward the cumulative impact.

6.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

No significant impacts would occur and no mitigation is required.

6.5 CONCLUSION

No significant impacts would occur and no mitigation is required.

7.0 LOCAL POLICIES, ORDINANCES, AND ADOPTED PLANS

7.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Would the project conflict with the provisions of an adopted HCP, NCCP plan, or other approved local, regional or state HCP?

Any of the following conditions would be considered significant if:

- A. For lands outside of the MSCP, the project would impact Diegan coastal sage scrub vegetation in excess of the County's 5 percent habitat loss threshold, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
- B. The project would preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.



- C. The project will impact any amount of wetlands or sensitive habitat lands as outlined in the RPO.
- D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
- E. The project does not conform to goals and requirements outlined in any applicable HCP, Resource Management Plan (RMP), Special Area Management Plan, Watershed Plan, or similar regional planning effort.
- F. For lands within the MSCP, the project would not minimize impacts to BRCA, as defined in the BMO (County 2010c).
- G. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
- H. The project does not maintain existing movement corridors and/or habitat linkages, as defined by the BMO.
- I. The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- J. The project would reduce the likelihood of survival and recovery of listed species in the wild.
- K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
- L. The project would result in the take of eagles, eagle eggs, or any part of an eagle (Bald and Golden Eagle Protection Act; BGEPA).

7.2 ANALYSIS OF PROJECT EFFECTS

The project would result in significant impacts under the above guidelines for the following reason:

7.1.D The project has been specifically designed to restrict development to the lowest quality and most disturbed areas on the project site. Impacts to Diegan coastal sage scrub have been minimized by designing smaller pads and siting them outside of existing habitat to the extent possible given existing easements, required road and property setbacks, fuel modification, and other constraints. The project will mitigate unavoidable impacts to coastal sage scrub in accordance with Section 4.3 of the NCCP Guidelines through off-site preservation in the region. The project will avoid the highest quality coastal sage scrub on the site, including scrub contained within RPO wetland buffer and additional contiguous habitat totaling 1.5 acres that would be placed in biological open space easement. Impacts would be mitigated at a 2:1 ratio in accordance with *MM 4.4.1*, thus no significant impact would occur under County Guideline 7.1.D.



7.1.K Implementation of the project could potentially result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA), as breeding birds may temporarily or permanently leave their territories to avoid construction activities, which could lead to reduced reproductive success and increased mortality. This would be significant according to County Guideline 7.1.K.

The project would not result in significant impacts under the above guidelines for the following reasons:

- 7.1 A The project site is outside of the MSCP and the project would result in net impacts to 2.6 acres (54 percent) of the Diegan coastal sage scrub on site. An additional 2.3 acres would be considered impact neutral due to its location within biological open space on the site, including RPO wetland and buffer area, in additional to areas within the existing SDG&E easement and within 100 feet of existing inhabited structures. The loss of 2.6 acres of sage scrub would not be in excess of the County's 5 percent habitat loss threshold, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines. Under County Guideline 7.1.A, no significant impact would occur.
- 7.1.B The project site occurs outside of PAMA under the draft NCMSCP. Implementation of the project would not preclude or prevent the preparation of the draft NCMSCP or any alternative subregional NCCP in the future. The site is not identified as an area critical to future habitat preserves. Under County Guideline 7.1.B, no significant impact would occur.
- 7.1.C The project would avoid RPO wetland on site. Under County Guideline 7.1.C, no significant impact would occur.
- 7.1.E The project site is within the Draft North County Subarea Plan boundary, but is not within the adopted South County Subarea Plan. Under County Guideline 7.1.E, no significant impact would occur.
- 7.1.F The project site is not within County's adopted MSCP. Under County Guideline 7.1.F, no significant impact would occur.
- 7.1.G The project would not preclude connectivity between areas of high habitat values, as lands immediately adjacent to the project site are developed. As such, no significant impact would occur under County Guideline 7.1.G.
- 7.1.H The project is not located within the adopted MSCP Subarea Plan and the BMO does not apply. The project site is situated at the eastern edge of the urbanized Rancho Santa Fe area, outside of future PAMA (Figure 4). The site is not identified as being part of a local or regional corridor or linkage and does not by itself support or contribute to a corridor or linkage. The site currently has no direct connectivity to large blocks of habitat and is constrained by existing development to the immediate north, south, east, and west. Habitat on site is limited and significant development barriers exist in the local area for large mammals. Large mammal movement through the region is likely restricted to the



larger habitat blocks (e.g., Elfin Forest, Rancho Cielo, Del Dios) and riparian corridors (e.g., Escondido Creek, San Dieguito River) located further to the northeast, east, and southeast. Local movement of large mammals is likely restricted to areas within the Rancho Cielo open space located further to the east of the site and east of the Santa Fe Irrigation District facility. Large mammals such as mule deer and coyote likely utilize this open space as they move to and from Escondido Creek and San Dieguito River. The project site does not by itself function or contribute to local or regional corridors or linkage areas for large mammals. At best, large mammals could temporarily stop at the site to rest or forage, as evidenced by the mule deer and coyote sign observed, although the overall quality of the habitat is relatively low. The site could facilitate local bird movement, including that for the coastal California gnatcatcher, but not as a function of a linear corridor or linkage. The patchy arrangement of habitat on site does not provide a contiguous canopy of vegetative cover and does not serve as live-in habitat due to the lack of high quality resources. The site is not part of an intact or fragmented linear arrangement of habitat. The resources in the local area do not suggest the presence of an archipelago or stepping stone linkage. The on-site preserve design would conserve the highest quality sage scrub as one relatively contiguous swath traversing the site diagonally and following natural topography and vegetative cover. This design conserves the highest quality linear arrangement of habitat on site and the most likely linear route for bird movement through the site. The project would preserve the highest quality, intact habitat on site with respect to temporary habitat for birds that could forage, disperse, and migrate through the site and local area. Bird movement functions, including that which is presumed to exist for the gnatcatcher, would continue on the project site under post-project conditions. Therefore, no significant impact would occur under County Guideline 7.1.H.

- 7.1.I The project is not located within the adopted MSCP Subarea Plan. Under County Guideline 7.1.I, no significant impact would occur.
- 7.1.J The project would not reduce the likelihood of survival and recovery of listed species in the wild. As addressed under County Guideline 3.1.A, the project would impact 2.6 acres of Diegan coastal sage scrub habitat that could be used as temporary habitat for the federally threatened coastal California gnatcatcher. The on-site habitat is disturbed, relatively small in size, fragmented, and isolated from larger stands in the local area. The site is highly constrained to the immediate north, south, east, and west. The potential for gnatcatchers to breed on site is considered low. Existing developments and incompatible land uses immediately adjacent to the site serve as obstructions to gnatcatcher movement in the local area. A patchy distribution of vegetation exists and the potential for gnatcatchers to temporarily forage, disperse, and/or migrate through the site is considered Breeding season protocol-level surveys were conducted for moderate to high. gnatcatcher in April and May 2014. A single male was confirmed to using off-site habitat to the immediate east of the site, although the male was not found to be associated with an active nest or breeding territory. A single unpaired gnatcatcher was also observed temporarily moving through the site during the April 10 general biological survey. Gnatcatchers are known to occur within the expansive core habitat areas located further to the northeast and east of the site. The site is not directly connected with this



off-site habitat, but is close enough to reasonably propose that gnatcatchers could temporarily utilize and move through the on-site habitat. The site does not currently support a breeding territory and would not be expected to support a significant population of gnatcatchers. Therefore, it can be concluded that potential impacts of the project on gnatcatcher would be limited to the loss of temporary foraging, dispersal, and migration habitat. Approximately 2.3 acres of contiguous coastal sage scrub on site will be placed in biological open space easement or protected from certain uses within limited building zone easement. The project would conserve existing gnatcatcher functions and accommodate future gnatcatcher use of avoided habitat on site. Implementation of MM 3.4.1 would ensure that no impacts occur to gnatcatcher individuals potentially breeding within off-site habitat or moving through on- site habitat. Implementation of MM 4.4.1 would ensure that unavoidable impacts to coastal sage scrub are mitigated at a 2:1 ratio through off-site preservation. With the implementation of these measures, no significant impact would occur under County Guideline 7.1.J.

7.1.L Implementation of the project would not result in the take of eagles, eagle eggs, or any part of an eagle. Under County Guideline 7.1.L, no significant impact would occur.

7.3 CUMULATIVE IMPACT ANALYSIS

The cumulative projects would be required to conform to County Guidelines 7.1.A through 7.1.L and provide mitigation as appropriate. Mitigation is proposed to reduce the project-level impacts on migratory birds. Conformance or mitigation, as appropriate, would be required for the project and for the other cumulative projects in order to obtain a recommendation for approval, thus, no cumulative impacts would occur.

7.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

- Impact 7.4.1 The project could potentially result in the killing of migratory birds or destruction of migratory bird nests and/or chicks, if clearing or grubbing takes place in occupied nesting habitat during the avian breeding season.
- MM 7.4.1 No grubbing, clearing, or grading shall occur during the general avian breeding season (February 1 through September 15). As such, all grading permits, improvement plans, and the final map shall state the same. If grubbing, clearing, or grading would occur during the general avian breeding season, a pre-construction survey shall be conducted by a qualified biologist to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within this area, clearing, grubbing, and grading shall be allowed to proceed. If active nests or nesting birds are observed within the area, the biologist shall flag the active nests and construction activities shall avoid active nests until nesting behavior has ceased, nests have failed, or young have fledged.



7.5 CONCLUSION

Implementation of the project would result in potentially significant impacts to breeding migratory birds. Avoiding clearing of vegetation during the bird breeding season would reduce these impacts to below a level of significance.

8.0 SUMMARY OF PROJECT IMPACTS AND MITIGATION

Implementation of the project would result in significant impacts to special status animal species, sensitive natural communities, and local policies. Table 8 provides a summary of project impacts and mitigation pertaining to sensitive natural communities. Table 9 provides a summary of the proposed mitigation measures.



Table 8 SUMMARY OF VEGETATION COMMUNITIES, IMPACT, AND MITIGATION FOR THE ALISO CANYON SUBDIVISION PROJECT

VEGETATION			OFF SITE	IMPACT	MITIGATION		
COMMUNITY/ HABITAT	EXISTING	IMPACTS	OFF-SITE IMPACTS	NEUTRAL	Ratio	Required	Provided Off Site
Southern willow scrub (63320)	0.24			0.24	3:1		
Freshwater Marsh (52400)	0.11			0.11	3:1		
Native Grassland (42100)	0.174	0.016		0.158	3:1	0.048**	0.048**
Diegan Coastal Sage Scrub (32500)	4.8	2.5	<0.1 (0.065)	2.3	2:1	5.2	5.2
Non-native Grassland (42200)	5.3	3.7		1.6	0.5:1	1.9	1.9
Eucalyptus Woodland (79100)	1.5	1.1		0.3			
Non-native Vegetation (11000)	0.9	0.1		0.9			
Intensive Agriculture (18200)	3.2	2.5		0.7			
Disturbed Habitat (11300)	10.7	7.2	<0.1 (0.007)	3.4			
Developed Land (12000)	4.4	3.3	<0.1 (0.023)	1.2			
TOTAL	31.4	20.4	<0.1	10.9		7.2	7.2

^{*} Vegetation categories and numerical codes are from Oberbauer (2005)

^{**} Purchase of off-site Diegan coastal sage scrub credits will include native grassland components to fulfill 0.048 acre of native grassland mitigation obligation.



Table 9 SUMMARY OF MITIGATION MEASURES

PROPOSED MITIGATION	LEVEL OF SIGNIFICANCE AFTER MITIGATION	GUIDELINE NUMBER(S)†
MM 3.4.1 No grading, clearing, or blasting shall	Less than significant	3.1.A
occur within 300 feet of occupied Diegan coastal sage		3.1.B
scrub during the breeding season of the coastal		3.1.L
California gnatcatcher (March 1 – August 31). As such,		
all grading permits, improvement plans, and the final		
map shall state the same. If clearing, grading, or		
blasting would occur during the breeding season for the gnatcatcher, a pre-construction survey shall be		
conducted to determine whether gnatcatchers occur		
within the areas impacted by noise. To avoid take		
under the ESA, impacts shall be avoided within 300 feet		
of nesting gnatcatchers. If there are no gnatcatchers		
nesting (includes nest building or other breeding/nesting		
behavior) within this area, grading, clearing, or blasting		
shall be allowed to proceed. However, if any		
gnatcatchers are observed nesting or displaying		
breeding/nesting behavior within the area, construction		
shall be postponed until all nesting (or breeding/nesting		
behavior) has ceased or until after August 31.	T .1	215
MM 3.4.2a Mitigation for impacts to native grassland	Less than significant	3.1.F
shall occur at a ratio of 3:1 through purchase of off-site Diegan coastal sage scrub credits containing native		4.1A
grassland components at the Buena Creek Conservation		
Bank or Red Mountain Mitigation Bank in consultation		
with the County and resource agencies prior to issuance		
of a grading permit. Mitigation for impacts to non-		
native grassland shall occur at a 0.5:1 ratio through the		
purchase of 1.9 acres of non-native grassland credits at		
an approved mitigation bank in consultation with the		
County and resource agencies prior to issuance of a		
grading permit.		



Table 9 (cont.) SUMMARY OF MITIGATION MEASURES

PROPOSED MITIGATION	LEVEL OF SIGNIFICANCE AFTER MITIGATION	GUIDELINE NUMBER(S)†
MM 3.4.2b Open Space Fencing. In order to protect the proposed open space easement from entry, or disturbance, permanent fencing shall be installed. Open space fencing shall be placed along the biological open space boundary as indicated on the approved Biological Resources Report, Figure 13. The fencing design shall consist of split rail or wire. The applicant shall install the fencing as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor, that the open space fencing has been installed at the open space easement boundary. Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the fencing shall be placed. PDS shall review the photos and statement for compliance with this condition.	Less than significant	3.1.F 4.1A
MM 3.4.2c Signage. In order to protect the proposed open space easement from entry, informational signs shall be installed. Open space signs shall be placed along the biological open space boundary of Lots(s) 1, 2, and 7 as indicated on the approved Biological Resources Report, Figure 13. The signs must be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than 3 feet in height from the ground surface, and must state the following:	Less than significant	3.1.F 4.1A
Sensitive Environmental Resources Disturbance beyond this point is restricted by easement. Information: Contact the County of San Diego, Planning & Development Services Reference: PDS2014-TM-5589		
The applicant shall install the signs as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor, that the open space signs have been installed at the boundary of the open space easement(s). Prior to the approval of the Final Map and prior to the approval of any plan and issuance of any permit, the open space		



Table 9 (cont.) SUMMARY OF MITIGATION MEASURES

PROPOSED MITIGATION	LEVEL OF SIGNIFICANCE AFTER MITIGATION	GUIDELINE NUMBER(S)†
signs shall be installed. The PDS shall review the photos and statement for compliance with this condition. If all biological mitigation is completed off site, no signs will be required. DOCUMENTATION: The applicant shall install the signs as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor, that the open space signs have been installed at the boundary of the open space easement(s). TIMING: Prior to the approval of the Final Map and prior to the approval of any plan and issuance of any permit, the open space signs shall be installed. MONITORING: The PDS shall review the photos and statement for compliance with this condition. If all biological mitigation is completed off site, no signs will be required.		
MM 3.4.3 No grubbing, clearing, or grading within 500 feet of active tree-nesting raptor (i.e., Cooper's hawk, red-tailed hawk) habitat (January 15 to July 15) shall occur. As such, all grading permits, improvement plans, and the final map shall state the same. If grubbing, clearing, or grading would occur during the raptor breeding season, a pre-construction survey shall be conducted to determine whether these species occur within the areas impacted by noise. If there are no raptors nesting (includes nest building or other breeding/nesting behavior) within this area, development shall be allowed to proceed. However, if raptors are observed nesting or displaying breeding/nesting behavior within the area, construction shall (1) be postponed until all nesting (or breeding/nesting behavior) has ceased or until after July 15; or (2) a temporary noise barrier or berm shall be constructed at the edge of the development footprint to ensure that noise levels are reduced to below 60 dB or ambient. Alternatively, the use of construction equipment could be scheduled to keep noise levels below 60 dB or ambient in lieu of, or in concert with, a wall or other noise barrier.	Less than significant	3.1L 7.1.K



Table 9 (cont.) SUMMARY OF MITIGATION MEASURES

PROPOSED MITIGATION	LEVEL OF SIGNIFICANCE AFTER MITIGATION	GUIDELINE NUMBER(S)†
MM 4.4.1 Impacts to 2.6 acres of Diegan coastal	Less than significant	4.1.A
sage scrub shall be mitigated at a 2:1 ratio through		
purchase of 5.2 acres of off-site Diegan coastal sage		
scrub credits containing native grassland components at		
the Buena Creek Conservation Bank or Red Mountain		
Mitigation Bank in consultation with the County and		
resource agencies prior to issuance of a grading		
permit.Impacts to 1.8 acres of Diegan coastal sage scrub		
shall be mitigated at a 2:1 ratio through on site		
preservation of 0.8 acre in biological open space		
easement and purchase of 2.8 acres of coastal sage scrub		
credit at the Red Mountain Mitigation Back or other		
approved mitigation bank in consultation with the		
County and resource agencies prior to issuance of a		
grading permit.		
MM 7.4.2 In order to ensure compliance with the	Less than significant	7.1.K
MBTA, no grubbing, clearing, or grading shall occur		
during the general avian breeding season (February 1 –		
September 15). As such, all grading permits,		
improvement plans, and the final map shall state the		
same. If grubbing, clearing, or grading would occur		
during the general avian breeding season, a pre-		
construction survey shall be conducted by a qualified		
biologist to determine if active bird nests are present in		
the affected areas. If there are no nesting birds (includes		
nest building or other breeding/nesting behavior) within		
this area, clearing, grubbing, and grading shall be		
allowed to proceed. If active nests or nesting birds are		
observed within the area, the biologist shall flag the		
active nests and construction activities shall avoid active		
nests until nesting behavior has ceased, nests have		
failed, or young have fledged.		

[†]Corresponding to County Guideline numbering as listed in this report.



9.0 LIST OF PREPARERS AND PERSONS/ORGANIZATIONS CONTACTED

The following individuals contributed to the fieldwork and/or preparation of this report.

Monica Bilodeau‡ M.A., Public Administration with Emphasis in Environmental Planning,

San Diego State University, 2010

B.S., Biological Science, Emphasis in Ecology, San Diego State

University, 2006

Katherine Fuller M.A., Geography, San Diego State University, 2006

B.A., Geography and Environmental Studies, University of Oregon, 2003

Erica Harris B.S., Biology with emphasis in zoology, San Diego State University, 2009

Jason Kurnow B.S., Wildlife Biology, Minor in Botany, Humboldt State University, 2001

Stacy Nigro† B.S., Forest Resources and Conservation (emphasis Wildlife Ecology),

University of Florida, 1994

Karl Osmundson*† B.S., Wildlife, Fish, and Conservation Biology, University of California,

Davis

Aleksandra Richards M.A., International Relations, University of San Diego, 2010

B.A., Communications, Emphasis in Print Journalism, California State

University Fullerton, 2008

*Primary report author

‡Contributing author

†County-approved Biological Consultant



10.0 REFERENCES

- American Ornithologists' Union (AOU). 2013. The AOU Checklist of North American Birds. URL: http://www.aou.org/checklist/north/suppl/51.php
- Baker, R.J., L.C. Bradley, R.D. Bradley, J.W. Dragoo, M.D. Engstrom, R.S. Hoffmann, C.A. Jones, F. Reid, D.W. Rice, and C. Jones. 2003. Revised checklist of North American Mammals north of Mexico. Occasional Papers of the Museum, Texas Tech University 223.
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley.
- Bats of San Diego County. 2012. http://home.earthlink.net/~cmsquare/
- Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with the USDI, C Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.
- California Department of Fish and Wildlife (CDFW). 2013. State and Federally Listed Endangered, Threatened, and Rare Plants of California. State of California, The Resources Agency, Department of Fish and Wildlife, Biogeographic Data Branch, California Natural Diversity Database.
 - URL: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEPlants.pdf. January.
 - 2011a. State and Federally Listed Endangered and Threatened Animals of California. State of California, The Natural Resources Agency, Biogeographic Data Branch. URL: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEAnimals.pdf. January.
 - 2011b. Special Animals List (898 taxa). State of California, The Resources Agency, Department of Fish and Game, Biogeographic Data Branch, California Natural Diversity Database. URL: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spanimals.pdf. January.
- California Invasive Plant Council (Cal-IPC). 2006. California Invasive Plant Inventory. February. URL: http://www.cal-ipc.org/ip/inventory/index.php.
- California Native Plant Society (CNPS). 2013. Inventory of Rare and Endangered Plants. Internet searchable database Version 7-10c. URL: www.rareplants.cnps.org. Updated quarterly.
- Collins, Joseph T. and Travis W. Taggart. 2006. The Center for North American Herpetology (CNAH): The Academic Portal to North American Herpetology. URL: http://www.cnah.org/index.asp.



- Conservation Biology Institute (CBI). 2003. Review of Regional Habitat Linkage Monitoring Locations. Multiple Species Conservation Program. January.
- County of San Diego. 2011. San Diego County Code Title 8 Zoning and Land Use Regulations, Division 6. Miscellaneous Land Use Regulations. Chapter 6. Resource Protection Ordinance. October 14.
 - 2010a. Report Format and Content Requirements Biological Resources. Land Use and Environmental Group, Department of Planning and Land Use and Department of Public Works. Fourth Revision. September 15.
 - 2010b. Guidelines for Determining Significance Biological Resources. Land Use and Environmental Group, Department of Planning and Land Use and Department of Public Works. Fourth Revision. September 15.
 - 2010c. Biological Mitigation Ordinance. Ordinance No. 8845, 9246, 9632, 10039. April 2.
 - 2002. Composite Habitat Evaluation Map. April.
 - 1997. Multiple Species Conservation Program, County of San Diego Subarea Plan. October 22.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. with Appendices.
- Glassberg, J. 2001. Butterflies through Binoculars. The West. A Field Guide to the Butterflies of Western North America. Oxford University Press. New York.
- HELIX Environmental Planning, Inc. (HELIX). 2012. Jurisdictional Delineation Report for Eden Hills. December 13.
- Hickman, J.C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press, Berkeley, 1400 pp.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, 156 pp.
- Jackson, L. 1985. Ecological origins of California's Mediterranean grasses. Journal of Biogeography 12: 349-361.
- Konecny Biological Services. 2013. Results of a Focused Survey for the Least Bell's Vireo and Coastal California Gnatcatcher at the Valiano Property Site, San Diego County, California, 2013. August 23.



- Oberbauer, Thomas. 2008. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Revised from 1996 and 2005. July.
- Rebman, Jon P. and Michael G. Simpson. 2006. Checklist of the Vascular Plants of San Diego County. 4th Edition. San Diego Natural History Museum, San Diego, California. 100 pp.
- San Diego Natural History Museum (SDNHM). 2010. Plant Atlas Project. Version May 2010. Weblink: http://www.sdplantatlas.org/
- Unitt, P. 2004. *San Diego County Bird Atlas*. No. 39. Proceedings of the San Diego Society of Natural History. October 31.
- U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J.S. Wakely, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Fish and Wildlife Service. 2011. 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List Hermes Copper Butterfly as Endangered or Threatened. Federal Register, Vol. 76, No. 72, Thursday, April 14.
 - 2001. Least Bell's Vireo Presence/Absence Survey Guidelines. January 19.
 - 1997. Coastal California gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines. July 28.
- Zeiner, David C., William F. Laudenslayer, Jr., Kenneth E. Mayer, and Marshall White, eds. 1990. California's Wildlife, Volume III, Mammals. California Statewide Wildlife Habitat Relationships System. State of California, The Resources Agency, Department of Fish and Game. Sacramento, April.



THIS PAGE INTENTIONALLY LEFT BLANK



Appendix A PLANT SPECIES OBSERVED

Appendix A

PLANT SPECIES OBSERVED – ALISO CANYON SUBDIVISION

FAMILY Dicotyledons	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Aizoaceae	Carpobrotus edulis*	hottentot-fig	DH
	Mesembryanthemum nodiflorum*	slender-leaved iceplant	DH
Amaranthaceae	Atriplex semibaccata*	Australian saltbush	DH
	Chenopodium murale*	nettle-leaf goosefoot	NNG
	Salsola tragus*	Russian thistle	NNG
Anacardiaceae	Malosma laurina	laurel sumac	DCSS, NNG
	Rhus integrifolia	lemonadeberry	DCSS, NNG
	Schinus molle*	Peruvian pepper tree	NNV, DCSS, EUCW
	Schinus terebinthifolius*	Brazilian pepper tree	FWM
Apiaceae	Foeniculum vulgare*	fennel	NG, DCSS,
1	Ü		NNG
Asparagaceae	Asparagus asparagoides*	African asparagus fern	SWS
Asteraceae	Ambrosia psilostachya	western ragweed	NNG
	Artemisia californica	California sagebrush	SWS, DCSS
	Baccharis pilularis	coyote brush	NG, DCSS,
	_		NNG
	Baccharis salicifolia	mule fat	SWS
	Bahiopsis laciniata	San Diego sunflower	DCSS
	Centaurea melitensis*	star thistle	DCSS, DH
	Corethrogyne filaginifolia	California-aster	NNG
	Cynara cardunculus*	cardoon	SWS, DCSS,
			NNG
	Deinandra fasciculata	fascicled tarplant	NNG, DH
	Dittrichia graveolens*	stinkwort	DCSS
	Encelia californica	California encelia	DCSS
	Eriophyllum confertiflorum	golden yarrow	DCSS
	Gazania linearis*	gazania	NNG
	Gnaphalium californicum	California everlasting	DCSS
	Hedypnois cretica*	Crete weed	DH, NNG
	Helminthotheca echioides*	bristly ox-tongue	SWS, NNG
	Heterotheca grandiflora	telegraph weed	DCSS, DH
	Isocoma menziesii	goldenbush	NG, DCSS, DH, NNG
	Lactuca serriola*	wild lettuce	NNG

Appendix A (cont.) PLANT SPECIES OBSERVED – ALISO CANYON SUBDIVISION

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons (con	it.)		
Asteraceae	Malacothrix clevelandii	Cleveland's malacothrix	DCSS, EUCW
(cont.)			
	Pluchea odorata	salt marsh fleabane	SWS, FWM
	Sonchus oleraceus*	common sow thistle	DH
Boraginaceae	Amsinckia menziesii var.	rancher's fiddleneck	NNG, DCSS
	intermedia		
	Echium candicans*	pride of Maderia	NNG
Brassicaceae	Hirschfeldia incana*	shortpod mustard	DH, NNG
	Raphanus sativus*	wild radish	DH
	Sisymbrium sp.*	mustard	DH
Cactaceae	Opuntia ficus-indica*	Indian-fig	NNG
	Opuntia littoralis	coastal prickly pear	DCSS
	Opuntia oricola	tall coastal prickly pear	DCSS
Convulvulaceae	Calystegia macrostegia	morning-glory	NNG
Cucurbitaceae	Marah macrocarpa	wild cucumber	DCSS
Euphorbiaceae	Chamaesyce maculata*	spotted spurge	DH
	Croton setigerus	dove weed	DCSS
	Euphorbia peplus*	petty spurge	DCSS
	Ricinus communis*	castor-bean	DH
Fabaceae	Acacia sp.*	acacia	NNV
	Acmispon glaber	deerweed	NG, DCSS,
			NNG
	Gleditsia sp.*	locust tree	NNV
	Lupinus sp.	lupine	NNG
Geraniaceae	Erodium sp.*	filaree	DH
Hydrophyllaceae	Phacelia cicutaria var. hispida	caterpillar phacelia	DCSS
Lamiaceae	Marrubium vulgare*	horehound	DCSS
	Salvia apiana	white sage	DCSS, NNG
	Salvia mellifera	black sage	DCSS
Myrtaceae	Eucalyptus sp.*	eucalyptus	NNV, DCSS,
			EUCW
Nyctaginaceae	Mirabilis laevis ssp. crassifolia	wishbone bush	DCSS
Oleaceae	Olea europaea*	olive	DCSS
Oxalidaceae	Oxalis pes-caprae*	Bermuda-buttercup	EUCW, DH

Appendix A (cont.) PLANT SPECIES OBSERVED – ALISO CANYON SUBDIVISION

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Dicotyledons (co	nt.)		
Papaveraceae	Eschscholzia californica	California poppy	DCSS
Phrymaceae	Mimulus aurantiacus	monkey-flower	DCSS
Plantaginaceae	Antirrhinum nuttallianum	Nuttall's snapdragon	DCSS
	Plantago erecta	dwarf plantain	DCSS
Plumbaginaceae	Limonium perezii	statice	NNG
Polygonaceae	Eriogonum fasciculatum	buckwheat	DCSS, EUCW
	Rumex crispus*	curly dock	NNG
Rhamnaceae	Rhamnus crocea	spiny redberry	DCSS
Rosaceae	Heteromeles arbutifolia	toyon	DCSS
Salicaceae	Salix lasiolepis	arroyo willow	SWS, FWM
Solanaceae	Datura wrightii	jimson weed	NNG
	Nicotiana glauca*	tree tobacco	DCSS
Tamaricaceae	Tamarix ramosissima*	French tamarisk	FWM
Urticaceae	Urtica urens*	dwarf nettle	DH
Lycophytes			
Selaginellaceae	Selaginella cinerascens	ashy spike-moss	DCSS
Monocotyledons			
Agavaceae	Agave americana*	American agave	NNV, DCSS
	Yucca sp.	yucca	DCSS
Arecaceae	Phoenix canariensis*	Canary Island date palm	NNG
Hyacinthaceae	Chlorogalum parviflorum	small-flower soap-plant	DCSS
Iridaceae	Sisyrinchium bellum	blue-eyed grass	NG, DCSS
Liliaceae	Aloe sp. *	aloe	SWS
Poaceae	Avena sp.*	oats	NG, NNG
	Bromus diandrus*	common ripgut grass	EUCW, NNG
	Bromus hordeaceus*	soft chess	NNG
	Bromus madritensis*	foxtail chess	DCSS, NNG
	Nassella lepida	foothill needlegrass	NG

Appendix A (cont.) PLANT SPECIES OBSERVED – ALISO CANYON SUBDIVISION

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT**
Monocotyledons	(cont.)		
Poaceae (cont.)	Polypogon monspeliensis*	annual beard grass	FWM
	Schismus barbatus*	Mediterranean grass	DH
Themidaceae	Dichelostemma capitatum	blue dicks	DCSS
Typhaceae	Typha sp.	cattail	SWS, FWM
Gymnosperms			
Pinaceae	Pinus sp.*	pine	NNV

^{*}Non-native species

FWM=freshwater marsh; NNG=non-native grassland; NNV=non-native vegetation; SWS=southern willow scrub; NG=native grassland

^{**}DCSS=Diegan coastal sage scrub; DH=disturbed habitat; EUCW=eucalyptus woodland;

Appendix B ANIMAL SPECIES OBSERVED OR DETECTED

Appendix B ANIMAL SPECIES OBSERVED OR DETECTED – ALISO CANYON SUBDIVISION

TAXON	FAMILY	SCIENTIFC NAME	COMMON NAME
INVERTEBRATES	D '11' 1	ъ	
Hymenoptera	Pompilidae	Pepsis sp.	tarantula hawk
Lepidoptera	Hesperiidae	Erynnis funeralis	funereal duskywing
	Pieridae	Anthocharis sara	Sara orangetip
VERTEBRATES			
Birds			
Aphodiformes	Trochilidae	Calypte anna	Anna's hummingbird
		Calypte costae	Costa's hummingbird
Columbiformes	Columbidae	Zenaida macroura	mourning dove
Cuculiformes	Cuculidae	Geococcyx californianus	greater roadrunner
Falconiformes	Accipitridae	Buteo jamaicensis	red-tailed hawk
Galliformes	Odontophoridae	Callipepla californica	California quail
Passeriformes	Aegithalidae	Psaltriparus minimus	bushtit
	Corvidae	Aphelocoma californica	western scrub jay
		Corvus brachyrhynchos	American crow
	Emberizidae	Melospiza melodia	song sparrow
		Pipilo crissalis	California towhee
		Pipilo maculatus	spotted towhee
		Zonotrichia leucophrys	white-crowned sparrow
	Fringillidae	Carduelis psaltria	lesser goldfinch
	-	Carpodacus mexicanus	house finch
	Icteridae	Icterus cucullatus	hooded oriole
	Mimidae	Mimus polyglottos	northern mockingbird
	Parulidae	Geothlypis trichas	common yellowthroat
		Vermivora celata	orange-crowned warbler
	Timaliidae	Chamaea fasciata	wrentit
	Troglodytidae	Thryomanes bewickii	Bewick's wren
	<i>U</i> ,	Troglodytes aedon	house wren
	Tyrannidae	Sayornis nigricans	black phoebe
	<i>J</i>	Tyrannus vociferans	Cassin's kingbird
Piciformes	Picidae	Colaptes auratus	northern flicker
		Picoides nuttallii	Nuttall's woodpecker
			1. Stall 5 Woodpooler

Appendix B (cont.) ANIMAL SPECIES OBSERVED OR DETECTED – ALISO CANYON SUBDIVISION

TAXON VERTEBRATES (FAMILY cont.)	SCIENTIFC NAME	COMMON NAME
<u>Mammals</u>			
Artiodactyla	Cervidae	Odocoileus hemionus fuliginata	southern mule deer†
Carnivora	Canidae	Canis familiaris Canis latrans	domestic dog coyote
	Felidae	Felis catus	domestic cat
Perissodactyla	Equidea	Equus ferus caballus	horse
Rodentia †Sensitive species	Sciuridae	Spermophilus beecheyi	California ground squirrel

Appendix C

SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
San Diego thorn- mint (Acanthomintha ilicifolia)	FT/SE CNPS List 1B.1 County List A	April –June	Low. Occurs on friable clay soils, often in open areas within grasslands. Often associated with vernal pools. This species was not observed during April and May 2014 rare plant surveys.
California adolphia (Adolphia californica)	/ CNPS List 2.1 County List B	December - May	Very low. Occurs on sandy to gravelly soils in dry canyons and washes in coastal sage scrub and chaparral. Perennial shrub would have been observed if present.
San Diego ambrosia (Ambrosia pumila)	FE/ CNPS List 1B.1 County List A	April – October	Low. Perennial rhizomatous herb that grows on sandy loam or clay soils, often in disturbed areas. Prefers chaparral, coastal scrub, valley and foothill grassland, or vernal pool habitats. This species was not observed during April and May 2014 rare plant surveys.
Del Mar manzanita (Arctostaphylos glandulosa ssp. crassifolia)	FE/ CNPS List 1B.1 County List A	December - June	Very low. Inhabits sandy coastal mesas and ocean bluffs in chaparral or Torrey pine forest. Large perennial shrub, would have been observed if present.
Rainbow manzanita (Arctostaphylos rainbowensis)	/ CNPS List 1B.1 County List A	December - March	Very low. Southern mixed chaparral is preferred habitat. Large perennial shrub would likely have been observed if present.
San Diego sagewort (Artemisia palmeri)	/ CNPS List 4.2 County List D	February - September	Low. Prefers sandy, mesic soils. Inhabits chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland. This species was not observed during April and May 2014 rare plant surveys.
Encinitas baccharis (Baccharis vanessae)	FT/SE CNPS List 1B.1 County List A	August - November	Very low. Perennial deciduous shrub occurs on sandstone which is not present on site.

SPECIES	LISTING OR	BLOOMING	POTENTIAL TO OCCUR
	SENSITIVITY	PERIOD	
San Diego goldenstar (Bloomeria clevelandii)	/ CNPS List 1B.1 County List A	April - May	Low. Found in mesa grasslands, and scrub edges on clay soils. Often seen on mounds between vernal pools in fine, sandy loam. No vernal pools on site. This species was not observed during April and May 2014 rare plant surveys.
Thread-leaved brodiaea (Brodiaea filifolia)	FT/SE CNPS List 1B.1 County List A	March - June	Very low. Perennial bulbiferous herb associated with annual grassland and vernal pools; often surrounded by shrub land habitats. Often occurs in openings on clay soils. No vernal pools on site. This species was not observed during April and May 2014 rare plant surveys.
Orcutt's brodiaea (Brodiaea orcuttii)	/ CNPS List 1B.1 County List A	May – July	Very low. Perennial bulbiferous herb associated with mesic, clay, or serpentine soils. Found in closed-cone coniferous forest, chaparral, cismontane woodland, meadows, seeps, valley and foothill grassland, or vernal pools. This species was not observed during April and May 2014 rare plant surveys.
Wart stemmed ceanothus (Ceanothus verrucosus)	/ CNPS List 2.2 County List B	December - May	Very low. Occurs in chaparral. Large perennial shrub would have been observed if present.
Southern tarplant (Centromadia parryi ssp. australis)	/ CNPS List 1B.1 County List A	May - November	Low. Annual herb is found in marshes and swamps or valley and foothill grassland. Site is outside of species known range. This species was not observed during April and May 2014 rare plant surveys.

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
Orcutt's spineflower (Chorizanthe orcuttiana)	FE/SE CNPS List 1B.1 County List A	March-May	Very low. Annual herb is found on sandy openings in closed-cone coniferous forest, maritime chaparral, and coastal scrub. No suitable habitat is present on site.
Long-spined spineflower (Chorizanthe polygonoides var. longispina)	/ CNPS List1B.2 County List A	April-July	Very low. Annual herb grows in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Site outside of species range. This species was not observed during April and May 2014 rare plant surveys.
Summer holly (Comarostaphylis diversifolia ssp. diversifolia)	/ CNPS List 1B.2 County List A	April - June	Very low. Occurs in chaparral. Large shrub visible all year. Species would have been observed if present.
Del Mar mesa sand aster (Corethrogyne filaginifolia var. linifolia)	/ CNPS List 1B.1 County List A	May- September	Very low. Perennial herb prefers sandy soils in maritime chaparral, coastal scrub, or coastal bluff scrub. No appropriate soils on site. This species was not observed during April and May 2014 rare plant surveys.
Variegated dudleya (Dudleya variegata)	/ CNPS List 1B.2 County List A	April - June	Very low. Perennial herb is often found on rocky or clay soils; sometimes associated with vernal pool margins. Occurs in openings in sage scrub and chaparral, in isolated rocky substrates in open grasslands, and in proximity to vernal pools and mima mound topography. No appropriate habitat on site. Was not observed during April and May 2014 rare plant surveys.

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
Sticky dudleya (Dudleya viscida)	/ CNPS List 1B.2 County List A	May - June	Very low. Perennial herb grows predominantly on very steep north-facing slopes in shady, mesic conditions. Potential habitat not present on site. Was not observed during April and May 2014 rare plant surveys.
Palmer's goldenbush (Ericameria palmeri ssp. palmeri)	/ CNPS List 2.2 County List B	July – November	Very low. Perennial evergreen shrub grows in chaparral and coastal scrub. This plant would have been observed if present.
San Diego button- celery (Eryngium aristulatum var. parishii)	FE/SE CNPS List 1B.1 County List A	April - June	Very low. Occurs in vernal pools or mima mound in areas with vernally moist conditions. No vernal pools are present on site. This species was not observed during April and May 2014 rare plant surveys.
Cliff spurge (Euphorbia misera)	/ CNPS List 2.2 County List B	December- August	Very low. Perennial scrub grows on coastal bluffs. Site is located outside of the species known range.
San Diego barrel cactus (Ferocactus viridescens)	/ CNPS List 2.1 County List B	May - June	Very low. Optimal habitat for this cactus appears to be Diegan coastal sage scrub hillsides, often at the crest of slopes, growing among cobbles. Succulent is perennial and would have been observed if present.
Palmer's grapplinghook (Harpagonella palmeri)	/ CNPS List 4.2 County List D	March - May	Low. Annual herb occurs in chaparral, coastal sage scrub, and grasslands on clay soils. This species was not observed during April and May 2014 rare plant surveys.

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
San Diego marsh- elder	/ CNPS List 2.2	April - October	Very low. Occurs along stream courses, and in marshes, swamps, and playas. Perennial shrub
(Iva hayesiana)	County List B		would have been observed if present.
Coulter's goldfields (Lasthenia glabrata ssp. coulteri)	/ CNPS List 1B.1 County List A	February-June	Very low. Annual herb of marshes, swamps, playas, and vernal pools. Site is outside of species known range. This species was not observed during April and May 2014 rare plant surveys.
Robinson's peppergrass (Lepidium virginicum var. robinsonii)	CNPS List 1B.2 County List A	January – July	Low. This annual herb grows in openings in chaparral and sage scrub at the coastal and foothill elevations. Typically observed in relatively dry, exposed locales rather than beneath a shrub canopy or along creeks. Potential habitat is limited on site. No <i>Lepidium</i> was observed during April and May 2014 rare plant surveys.
Sea dahlia (Leptosyne [Coreopsis] maritima)	CNPS List 2.2 County List B	March - May	Very low. Perennial herb of costal bluffs. Potential habitat is limited on site. Site likely occurs outside of species range. This species was not observed during April and May 2014 rare plant surveys.
Felt-leaved monardella (Monardella hypoleuca ssp. lanata)	CNPS List 1B.2 County List A	June - August	Low. perennial rhizomatous herb Typically occurs in the understory of mature stands of chamise in xeric situations. Very little suitable habitat on site and species was not observed.

SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
Spreading navarretia (Navarretia fossalis)	FT/ CNPS List 1B.1 County List A	April - June	Very low. Annual herb occurs in vernal pools, playas, freshwater marshes, and chenopod scrub. No suitable habitat on site. This species was not observed during April and May 2014 rare plant surveys.
Nuttall's scrub oak (Quercus dumosa)	/ CNPS List 1B.1 County List A	February- March	Very low. Found on sandy, clay loam soils in closed-cone coniferous forest, chaparral, and coastal scrub. Perennial evergreen shrub would have been observed if present on site.
Engelmann oak (Quercus engelmannii)	CNPS List 4.2 County List D	March - June	Very low. Grows in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland. Perennial deciduous tree would have been observed if present on site.
Purple stemodia (Stemodia durantifolia)	/ CNPS List 2.1 County List B	January- December	Very low. Perennial herb of Sonoran desert scrub. Prefers sandy soils which are not present on site.
Parry's tetracoccus (Tetracoccus dioicus)	CNPS List 1B.2 County List A	April - May	Very low. Perennial deciduous shrub A robust shrub that occurs in chamise chaparral with a preference for stony, decomposed Las Posas soils. Species would have been observed during surveys if present.

Appendix D

SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

	LISTING OR	
SPECIES	SENSITIVITY*	POTENTIAL TO OCCUR
	INVERTEB	RATES
San Diego fairy shrimp (Branchinecta sandiegonensis)	FE/ County Group 1	None. Occurs in seasonally astatic pools, which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral. No suitable habitat on site.
Monarch butterfly (Danaus plexippus)	/ County Group 2	Moderate. Roosts located in wind-protected tree groves such as eucalyptus, Monterey pine, or cypress, with nectar and water sources nearby. Site could potentially be used by this butterfly during migration.
Quino checkerspot butterfly (Euphydryas editha quino)	FE/ County Group 1	Low. Butterfly prefers sunny openings within chaparral or coastal sage shrub on hills or mesas near the coast. Requires high densities of food plants including <i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Orthocarpus purpurescens</i> . No host plants and limited nectar sources were observed on site.
Hermes copper (Lycaena hermes)	Candidate/ County Group 1	Low. Occurs in southern mixed chaparral and coastal sage scrub with mature specimens of its larval host plant, spiny redberry (<i>Rhamnus crocea</i>), in close association with its nectar plant, California buckwheat (<i>Eriogonum fasciculatum</i>). A few isolated spiny redberry are present on site, but they are not closely associated with buckwheat. The site likely occurs outside of this species current range.
	VERTEBR	ATES
Amphibians and Reptiles		
Arroyo toad (Anaxyrus californicus)	FE/SSC County Group 1	Very low. Found on stream banks with open-canopy riparian forest characterized by willows, cottonwoods, or sycamores; breeds in areas with shallow, slowly moving streams, but burrows in adjacent uplands during dry months. Suitable habitat is absent from the site.

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
	VERTEBRAT	TES (cont.)
Amphibians and Reptiles (c		Zio (cont.)
Orangethroat whiptail (Aspidoscelis hyperythra)	/SSC County Group 2	High. Coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements include open, sunny areas, shaded areas, and abundant insect prey base, particularly termites (<i>Reticulitermes</i> sp.). Marginal habitat occurs on site and this species is likely to occur in the local area.
Coastal whiptail (Aspidoscelis tigris stejnegeri)	/ County Group 2	High. Open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter, and an abundance of insects, spiders, or scorpions. Marginal habitat occurs on site and this species is likely to occur in the local area.
Red-diamond rattlesnake (Crotalus ruber)	/SSC County Group 2	Low. Found in chaparral, coastal sage scrub, along creek banks, particularly among rock outcrops or piles of debris with a supply of burrowing rodents for prey. Rock outcrops are not present on site. The high amount of disturbance and proximity to existing developments strongly reduces the potential for this species to occur.
San Diego banded gecko (Coleonyx variegatus abbotti)	/ County Group 1	Low. Chaparral and coastal sage scrub in areas with rock outcrops. Rock outcrops are not present on site. The high amount of disturbance and proximity to existing developments strongly reduces the potential for this species to occur.

CDECIEC	LISTING OR	DOTENTIAL TO OCCUP
SPECIES	SENSITIVITY*	POTENTIAL TO OCCUR
	VERTEBRAT	YES (cont.)
Amphibians and Reptiles (c	ont.)	
San Diego ringneck snake (Diadophis punctatus similis)	/ County Group 2	Moderate. Generally occurs in moist habitats such as oak woodlands and canyon bottoms. Sometimes encountered in grassland, chaparral, and coastal sage scrub but is generally restricted to leaf litter, rocky outcrops, woodpiles, or holes which are used for cover. Marginal habitat occurs within the uplands immediately adjacent to the drainage feature on site.
Western pond turtle (Emys marmorata) Coastal rosy boa	/SSC County Group 1	Very low. Almost entirely aquatic; occurs in freshwater marshes, creeks, ponds, rivers and streams, particularly where basking sites, deep water retreats, and egg laying areas are readily available. No suitable habitat occurs. Low. Occurs among rocky outcrops in
(Charina [Lichanura] trivirgata [roseofusca])	County Group 2	coastal sage scrub, chaparral, and desert scrub. Rock outcrops are not present on site.
Coast horned lizard (Phrynosoma blainvillii)	/SSC County Group 2	Low. Occurs in coastal sage scrub, chaparral, open oak woodlands, and open coniferous forests. Important habitat components include basking sites, adequate scrub cover, areas of loose soil, and an abundance of harvester ants (<i>Pogonomyrmex</i> sp.), a primary prey item. Suitable loose soil is absent from the site. The high amount of disturbance and proximity to existing developments strongly reduces the potential for this species to occur.
Coronado skink (Plestiodon [Eumeces] skiltonianus interparietalis)	/SSC County Group 2	Moderate. Occurs in grasslands, coastal sage scrub, and open chaparral where there is abundant leaf litter or low herbaceous growth. Marginal habitat occurs on site for this species.

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
	VERTEBRAT	TES (cont.)
Amphibians and Reptiles (c	ont.)	
Coast patch-nosed snake (Salvadora hexalepis virgultea)	/SSC County Group 2	Low. Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains (CaliforniaHerps.com 2012). Marginal habitat occurs. The high amount of disturbance and proximity to existing developments strongly reduces the potential for this species to occur.
Western spadefoot (Spea hammondii)	/SSC County Group 2	Very low. Occurs in open coastal sage scrub, chaparral, and grassland, along sandy or gravelly washes, floodplains, alluvial fans, or playas; requires temporary pools for breeding and friable soils for burrowing; generally excluded from areas with bullfrogs (<i>Rana catesbiana</i>) or crayfish (<i>Procambarus</i> sp.). No suitable habitat occurs on site.
California red-legged frog (Rana [aurora] draytonii)	FT/SSC County Group 1	Very low. Found in dense, shrubby riparian vegetation with deep, slow-moving water. Site is located outside of species current range. No suitable habitat occurs on site.
Two-striped garter snake (Thamnophis hammondii)	/SSC County Group 1	Low. Typical habitat is along permanent and intermittent streams bounded by dense riparian vegetation; also found associated with vernal pools and stock ponds. Marginal habitat occurs, however the site is likely too dry and exposed to support this species.
Birds		T
Cooper's hawk (Accipiter cooperii)	/WL County Group 1	High. Tends to inhabit lowland riparian areas and oak woodlands in proximity to suitable foraging areas such as scrublands or fields. This species likely occurs in the local area and could nest and forage on site.

	LISTING OR	
SPECIES	SENSITIVITY*	POTENTIAL TO OCCUR
	VERTEBRAT	ES (cont.)
Birds (cont.)		
Sharp-shinned hawk (Accipiter striatus)	/WL County Group 1	Low. Usually observed in areas with tall trees or other vegetative cover but can be
		observed in a variety of habitats. In San Diego County occurs in small numbers and only in winter.
Southern California	/WL	Low. Occurs in coastal sage scrub on rocky
rufous-crowned sparrow	County Group 1	hillsides and in canyons; also found in open
(Aimophila ruficeps		sage scrub/grassy areas of successional
canescens)		growth. Potential habitat on site is patchy
		and limited in extent. The site is highly
		disturbed and immediately surrounded by
		development.
Grasshopper sparrow	/SSC	Low. Typical habitat is dense grasslands
(Ammodramus savannarum)	County Group 1	that have little or no shrub cover. Habitat on site is limited and highly disturbed.
Bell's sage sparrow	/WL	Low. Occurs in sunny, dry stands of coastal
(Amphispiza belli belli)	County Group 1	sage scrub or chaparral. Potential habitat on site is patchy and limited in extent.
Golden eagle	BCC, BGEPA/	Very low. Typical foraging habitat includes
(Aquila chrysaetos)	WL, Fully	grassy and open, shrubby habitats.
	Protected	Generally nests on remote cliffs; requires
	County Group 1	areas of solitude at a distance from human
		habitation. This species would not be
		expected to nest on or in the vicinity of the
		site. This species is not likely to forage over
Long aged ovel	/886	the site.
Long-eared owl	/SSC	Very low. In San Diego County is a rare
(Asio otus)	County Group 1	resident in shady oak woodlands and broad riparian forests. Ideal habitat includes a
		closed canopy near open habitats for
		foraging and a supply of abandoned raptor
		or corvid nests or debris platforms for
		nesting (Unitt 2004). No suitable habitat
		occurs on site.

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR	
	VERTEBRATES (cont.)		
Birds (cont.)			
Burrowing owl (Athene cunicularia)	BCC/SSC County Group 1	Very low. Typical habitat is grasslands, open scrublands, agricultural fields, and other areas where there are ground squirrel burrows or other areas in which to burrow. All records of burrowing owl in northwestern San Diego County are prior to 1997 (Unitt 2004). The site is highly constrained and isolated from known locales. No sign of this species was observed during 2014 surveys.	
Coastal cactus wren (Campylorhynchus brunneicapillus sandiegonensis)	BCC/SSC County Group 1	Very low. Occurs in coastal sage scrub with large cacti for nesting. No suitable habitat occurs on site.	
Turkey vulture (Cathartes aura)	/ County Group 1	Low. Species occurs throughout much of San Diego County with the exception of extreme coastal San Diego where development is heaviest. Foraging habitat includes most open habitats with breeding occurring in crevices among boulders. No nesting habitat occurs on site. This species likely occurs in the local area and could range over the site.	
Northern harrier (Circus cyaneus)	/SSC County Group 1	Low. Within San Diego County, distribution is primarily scattered throughout lowlands but can also be observed in foothills, mountains, and desert. Typical habitat consists of open grassland and marsh. No nesting habitat occurs on site. This species likely occurs in the local area and could range over the site.	
Yellow-billed cuckoo (Coccyzus americanus occidentalis)	Candidate, BCC/ SE County Group 1	Very low. Generally occurs along larger river systems, where it nests in riparian forest dominated by willows and cottonwoods. No suitable habitat occurs on site.	

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
VERTEBRATES (cont.)		
Birds (cont.)		
Yellow warbler (Setophaga brewsteri)	/SSC County Group 2	Low. Occurs in riparian woodland. The riparian scrub on site is too small and sparse to support a nesting territory.
Southwestern willow flycatcher (Empidonax trailii extimus)	FE/SE County Group 1	Very low. Breeds within thickets of willows or other riparian understory usually along streams, ponds, lakes, or canyons. One of the most important characteristics of the habitat appears to be the presence of dense vegetation, usually throughout all vegetation layers present. Almost all breeding habitats are within close proximity of water or very saturated soil. The southern willow scrub on site is too small and sparse, and not suitable for this species.
California horned lark (Eremophila alpestris actia)	/WL County Group 2	Very low. Found on sandy beaches and in agricultural fields, grassland, and open areas. Marginal habitat occurs, but is not expansive and open enough to support this species.
Prairie falcon (Falco mexicanus)	BCC/WL County Group 1	Low. Nests on cliffs or bluffs and forages over open desert scrub or grassland. No suitable nesting habitat occurs. Marginal foraging habitat is present. This species could range over the local area.
Yellow-breasted chat (Ictera virens)	/SSC County Group 1	Low. Prefers mature riparian woodlands. The riparian scrub on site is too small and sparse to support a nesting territory.
Loggerhead shrike (Lanius ludovicianus)	BCC/SSC County Group 1	Low. Typical habitat includes open habitats including grasslands, shrublands, and ruderal areas with adequate perching locations. Marginal habitat occurs for this species.
California black rail (Laterallus jamaicensis coturniculus)	/ST County Group 2	Very low. Occurs in wetlands and marshes by the coast in San Diego County. No suitable habitat occurs on site.

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
	VERTEBRAT	ES (cont.)
Birds (cont.)		
Belding's savannah sparrow (Passerculus sandwichensis beldingi)	/SE County Group 1	Very low. Occurs in saltmarshes. No suitable habitat occurs on site.
White-faced ibis (Plegadus chihi)	/WL County Group 1	Very low. Occurs in large marshes, with nesting colony hidden in inaccessible reedbed or willow-covered area. Potential habitat absent from the site.
Coastal California gnatcatcher (Polioptila californica californica)	FT/SSC County Group 1	High. Occurs in coastal sage scrub and very open chaparral. Potential habitat on site is very patchy and limited in extent. Protocol surveys conducted in April and May 2014 were negative for the habitat on site. This species has a low potential to nest on site and a high potential to forage, disperse, and migrate through the site.
Light-footed clapper rail (Rallus longirostris levipes)	FE/SE County Group 1	Very low. Occurs in wetlands and marshes by the coast in San Diego County. No suitable habitat occurs on site.
California least tern (Sternula antillarum browni)	FE/SE County Group 1	Very low. Occurs in sandy beach and lagoon habitat by the coast in San Diego County. No suitable habitat occurs on site.
Least Bell's vireo (Vireo bellii pusillus)	FE/SE County Group 1	Very low. Inhabits riparian woodland and is most frequent in areas that combine an understory of dense, young willows or mule fat with a canopy of tall willows. The riparian scrub on site is too small and sparse to support a nesting territory.
Mammals		<u> </u>
Pallid bat (Antrozous pallidus)	/SSC County Group 2	Moderate. Locally common species of low elevations in California. Prefers rocky outcrops, cliffs, and crevices with open habitats for foraging. No roosting habitat occurs. Species could forage over the site.

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR	
	VERTEBRATES (cont.)		
Mammals (cont.)			
Ringtail (Bassariscus astutus)	/ County Group 2	Very low. Found in a mixture of shrubland and forest habitats at low to middle elevations in close association with rocky areas and riparian habitats. Site is too disturbed and urbanized to support this species.	
Dulzura pocket mouse (Chaetodipus californicus femoralis)	/SSC County Group 2	Low. Primarily associated with mature chaparral. It is known to occur in coastal sage scrub. The soils on site are not suitable for this species and no pocket mouse burrows were observed.	
Northwestern San Diego pocket mouse (Chaetodipus fallax fallax)	/SSC County Group 2	Low. Occurs in open areas of coastal sage scrub and weedy growth, often on sandy substrates. The soils on site are not suitable for this species and no pocket mouse burrows were observed.	
Townsend's western big-eared bat (Corynorhinus townsendii)	/SSC County Group 2	Low. Most abundant in mesic habitats. Considered uncommon in California (Zeiner, et al. 1990). Drinks water and requires caves, mines, tunnels, buildings, or other man-made structures for roosting. No roosting habitat occurs. Marginal foraging habitat occurs.	
Spotted bat (Euderma maculatum)	/SSC County Group 2	Very low. Prefers sites with adequate roosting habitat (i.e., cliffs); feeds over water and along washes. Rare in California (Zeiner, et al. 1990). No roosting habitat occurs. Marginal foraging habitat occurs.	
Western mastiff bat (Eumops perotis californicus)	/SSC County Group 2	Moderate. Suitable habitat consists of extensive open areas with abundant roost locations (crevices in cliff faces, high buildings, trees, tunnels). No roosting habitat occurs. Marginal foraging habitat occurs.	

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
	VERTEBRAT	ES (cont.)
Mammals (cont.)		
Mountain lion (Felis concolor)	/ County Group 2	Low. Requires extensive areas of riparian vegetation and brushy stages of various habitats with interspersed irregular terrain, rocky outcrops, and tree/brush edges. Main prey is mule deer. This species could potentially range over the local area, but is not likely to occur on or in the immediate vicinity of the site.
Western yellow bat (Lasiurus xanthinus)	/SSC 	Very low. Found in wooded areas and desert scrub, particularly in palm trees. Rare visitor to San Diego County (Bats of San Diego County 2012). No suitable habitat occurs on site.
San Diego black-tailed jackrabbit (Lepus californicus bennettii)	/SSC County Group 2	Low. Found primarily in open habitats including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas if there is at least some shrub cover present. Marginal habitat occurs on site. The site is likely too disturbed and urbanized to support this species.
California leaf-nosed bat (Macrotus californicus)	/SSC County Group 2	Very low. Prefers rocky, rugged terrain; roosts by day in caves, abandoned mines, and tunnels. Forages over nearby flats and washes. Potential habitat not present on site.
Small-footed myotis (Myotis ciliolabrum)	/ County Group 2	Low. Occurs in arid, upland habitats. Prefers open stands in forests and woodlands as well as brushy habitats. Feeds over and drinks from streams, ponds, springs, and stock tanks. No roosting habitat occurs. Marginal foraging habitat occurs.

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR	
	VERTEBRATES (cont.)		
Mammals (cont.)			
Long-eared myotis (Myotis evotis)	/ County Group 2	Low. Found in brush, woodland, and forest habitats, but coniferous woodlands and forests seem to be preferred. Roosts in rock crevices, buildings, under bark, and in snags. Feeds along habitat edges, in open habitat, and over water. No roosting habitat occurs. Marginal foraging habitat occurs.	
Fringed myotis (Myotis thysanodes)	/ County Group 2	Low. Occurs in a wide variety of habitats, but optimal habitats are oak and juniper forests and desert scrub. Roosts in caves, mines, buildings, and crevices. Forages in open habitats, streams, lakes, and ponds; requires water. No roosting habitat occurs. Marginal foraging habitat occurs.	
Long-legged myotis (Myotis volans)	/ County Group 2	Low. Feeds over water and over open habitats using denser woodland and forests for reproduction. Drinks regularly. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves. No roosting habitat occurs. Marginal foraging habitat occurs.	
Yuma myotis (Myotis yumanensis)	/ County Group 2	Low. Open forests and woodland are optimal habitat. Closely tied to bodies of water for foraging and drinking. Roosts in buildings, mines, crevices, caves, and under bridges. No roosting habitat occurs. Marginal foraging habitat occurs.	
San Diego desert woodrat (Neotoma lepida intermedia)	/SSC County Group 2	Low. Occurs in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca. No nests or other sign of this species were observed on site.	
Pocketed free-tailed bat (Nyctinomops femorosaccus)	/SSC County Group 2	Very low. Prefers desert habitats with high cliffs or rock outcrops. Suitable habitat not present on site.	

	T TOTAL OF	
SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
	VERTEBRAT	TES (cont.)
Mammals (cont.)		
Big free-tailed bat (Nyctinomops macrotis)	/SSC County Group 2	Very low. A rare species in California (Zeiner et al. 1990). Prefers rugged, rocky canyons. Often forages over water. Roosts in crevices in high cliffs or rock outcrops. No roosting habitat occurs. Marginal foraging habitat occurs.
Southern mule deer (Odocoileus hemionus fuliginatus)	/ County Group 2	High. Occurs within a wide range of open habitats associated with expansive open space. Sign of this species was observed on site. This species likely occurs in the local area could occasionally forage on site.
Southern grasshopper mouse (Onychomys torridus 12amona)	/SSC County Group 2	Low. Desert habitat is preferred, but it also occurs in coastal scrub and mixed chaparral. It is uncommon in valley foothill and montane riparian habitats. The site likely occurs outside of this species current range.
Pacific pocket mouse (Perognathus longimembris pacificus)	FE/SSC County Group 1	Very low. Coastal bluff scrub on sandstone by the coast. The soils on site are not suitable for this species and no pocket mouse burrows were observed. The site likely occurs too far inland for this species.
American badger (Taxidea taxus)	/SSC County Group 2	Low. Uncommon resident in California that occurs in herbaceous, shrub, and open stages of most habitats with dry, friable soils (Zeiner et al. 1990). The site is too disturbed and located in proximity to existing developments to support this species.

Appendix E

EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

Appendix E EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

FEDERAL, STATE, AND LOCAL CODES

U.S. Fish and Wildlife Service (USFWS)

FE Federally listed endangered FT Federally listed threatened

California Department of Fish and Wildlife (CDFW)

SE State listed endangered ST State listed threatened

SSC State species of special concern

WL Watch List

Fully Protected Fully Protected species refer to all vertebrate and invertebrate taxa of concern

to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish

and Game Commission and/or CDFW.

County of San Diego

Plant sensitivity:

List A Plants rare, threatened, or endangered in California or elsewhere

List B Plants rare, threatened, or endangered in California but more common elsewhere

List C Plants that may be quite rare, but more information is needed to determine rarity

status

List D Plants of limited distribution and are uncommon, but not presently rare or

endangered

Animal sensitivity:

Group 1 Animals that have a very high level of sensitivity, either because they are listed as threatened or endangered or because they have very specific natural history requirements that must be met.

Group 2 Animals that are becoming less common, but are not yet so rare that extirpation or extinction is imminent without immediate action. These species tend to be prolific within their suitable habitat types.

Appendix E (cont.) EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

OTHER CODES AND ABBREVIATIONS

California Native Plant Society (CNPS) Codes

Lists

- 1A = Presumed extinct.
- 1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.
- 2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.
- 3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.
- 4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

List/Threat Code Extensions

- .1 Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- .2 Fairly endangered in California (20 to 80 percent occurrences threatened)
- .3 Not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known)

A "CA Endemic" entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.

Appendix F SITE PHOTOGRAPHS



Photo 1: Overview of northwestern portion of the site, facing northwest.



Photo 2: Overview of northeastern portion of the site, facing northeast.





Photo 3: Overview of northeastern portion of the site, facing south.



Photo 4: Overview of eastern boundary of the site, facing north.





Photo 5: Typical view of nursery and related facilities in southeastern portion of site, facing west.



Photo 6: Typical view of nursery and related facilities in southeastern portion of site, facing east.





Photo 7: Non-native grassland in the southwestern portion of the site, facing southwest.



Photo 8: Pacifica Ranch Drive and SDG&E easement access road in central portion of the site, facing north.





Photo 9: Avoided habitat within SDG&E easement and immediate vicinity in the northwestern portion of the site, facing north.



Photo 10: Overview of avoided habitat to be placed in biological open space preserve in central portion of the site, facing northeast.



